

Final Report: Groundwater Monitoring at Morrill, Kansas, in September 2005 and March 2006, with Expansion of the Monitoring Network in January 2006

Environmental Science Division



United States Department of Agriculture

Work sponsored by Commodity Credit Corporation,
United States Department of Agriculture

About Argonne National Laboratory

Argonne is a U.S. Department of Energy laboratory managed by UChicago Argonne, LLC under contract DE-AC02-06CH11357. The Laboratory's main facility is outside Chicago, at 9700 South Cass Avenue, Argonne, Illinois 60439. For information about Argonne, see www.anl.gov.

Availability of This Report

This report is available, at no cost, at <http://www.osti.gov/bridge>. It is also available on paper to the U.S. Department of Energy and its contractors, for a processing fee, from:

U.S. Department of Energy
Office of Scientific and Technical Information
P.O. Box 62
Oak Ridge, TN 37831-0062
phone (865) 576-8401
fax (865) 576-5728
reports@adonis.osti.gov

Disclaimer

This report was prepared as an account of work sponsored by an agency of the United States Government. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of document authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof, Argonne National Laboratory, or UChicago Argonne, LLC.

Final Report: Groundwater Monitoring at Morrill, Kansas, in September 2005 and March 2006, with Expansion of the Monitoring Network in January 2006

by
Applied Geosciences and Environmental Management Section
Environmental Science Division, Argonne National Laboratory

June 2007



United States Department of Agriculture

Work sponsored by Commodity Credit Corporation,
United States Department of Agriculture

Contents

| | |
|---|------|
| Notation..... | v |
| Executive Summary | ES-1 |
| 1 Introduction..... | 1-1 |
| 1.1 Background..... | 1-1 |
| 1.2 The 2005–2006 Sampling Activities and the 2006 Network Expansion..... | 1-4 |
| 2 Field Activities..... | 2-1 |
| 2.1 Monitoring Wells | 2-1 |
| 2.1.1 Well Installation in January 2006 | 2-1 |
| 2.1.2 Completion and Development of Wells in January–February 2006..... | 2-2 |
| 2.2 Sampling of Monitoring Wells in September 2005 and March 2006..... | 2-2 |
| 2.3 Measurement of Groundwater Levels..... | 2-3 |
| 2.4 Quality Control for Sample Collection, Handling, and Analysis | 2-4 |
| 3 Field and Laboratory Data | 3-1 |
| 3.1 Coordinates Survey Data | 3-1 |
| 3.2 Analytical Data for Groundwater..... | 3-1 |
| 3.2.1 Field Measurements..... | 3-1 |
| 3.2.2 Contaminant Data | 3-1 |
| 3.2.3 Groundwater Characterization Data | 3-3 |
| 3.3 Groundwater Level Data..... | 3-4 |
| 3.4 Results of Quality Control Activities..... | 3-4 |
| 3.5 Waste Characterization, Handling, and Disposal | 3-6 |
| 4 Interpretation of Field and Laboratory Data | 4-1 |
| 4.1 Groundwater Level Data..... | 4-1 |
| 4.2 Delineation of Contaminants in Groundwater | 4-1 |
| 4.2.1 Carbon Tetrachloride Concentrations and Distribution..... | 4-1 |
| 4.2.2 Chloroform Concentrations and Distribution | 4-2 |
| 4.2.3 Nitrate Concentrations and Distribution | 4-3 |
| 4.3 Preliminary Screening for Anaerobic Biodegradation Processes | 4-3 |
| 5 Conclusion and Recommendations..... | 5-1 |
| 5.1 Conclusions..... | 5-1 |
| 5.2 Recommendations..... | 5-2 |
| 6 References..... | 6-1 |
| Appendix A: Well Construction Diagrams and Registration Forms | A-1 |

| | |
|---|---------|
| Appendix B: Chronological Summary of Activities at Morrill in September 2005– March 2006 | B-1 |
| Appendix C: Coordinates Survey Data | C-1 |
| Supplement 1: Groundwater Sample Data | (on CD) |
| Supplement 2: Water Level Data | (on CD) |
| Supplement 3: Quality Control for Sample Collection, Handling, and Analysis | (on CD) |
| Supplement 4: Chain-of-Custody Forms and Outside Laboratory Data | (on CD) |
| Supplement 5: Waste Characterization Data and Disposal Authorization..... | (on CD) |

Figures

| | |
|--|------|
| 1.1 Location of Brown County and Morrill, Kansas. | 1-5 |
| 1.2 Locations of the former CCC/USDA grain storage facility and public wells at Morrill | 1-6 |
| 1.3 Interpreted distribution of carbon tetrachloride in groundwater at Morrill in October 2003..... | 1-7 |
| 1.4 Interpreted distribution of carbon tetrachloride in groundwater at Morrill in 2004 | 1-8 |
| 2.1 Monitoring network at Morrill, as of March 2006..... | 2-5 |
| 3.1 Carbon tetrachloride levels in groundwater at Morrill, September 2005 | 3-7 |
| 3.2 Carbon tetrachloride levels in groundwater at Morrill, March 2006 | 3-8 |
| 3.3 Chloroform levels in groundwater at Morrill, March 2006 | 3-9 |
| 3.4 Nitrate levels in groundwater at Morrill, March 2006..... | 3-10 |
| 4.1 Potentiometric surface at Morrill, based on water levels measured manually on October 17, 2005..... | 4-6 |
| 4.2 Potentiometric surface at Morrill, based on water levels measured manually on March 19–23, 2006 | 4-7 |
| 4.3 Potentiometric surface at Morrill, based on water levels measured manually on June 16, 2006 | 4-8 |

| | | |
|-----|---|------|
| 4.4 | Hydrographs summarizing results of long-term water level monitoring in wells MW1S–MW8S at Morrill from July 15, 2004, to June 16, 2006..... | 4-9 |
| 4.5 | Lateral extent of the carbon tetrachloride contamination in groundwater at Morrill, as interpreted on the basis of sampling and analyses in March 2006 and flow direction on March 19–23, 2006..... | 4-10 |

Tables

| | | |
|-----|---|-----|
| 2.1 | Construction details for monitoring wells MW9S–MW11S at Morrill, Kansas | 2-1 |
| 3.1 | Concentrations of volatile organic compounds and nitrate in groundwater samples collected at Morrill in 2004, 2005, and 2006..... | 3-2 |
| 4.1 | Scoring of biodegradation processes at Morrill — March 2006 data..... | 4-5 |

Notation

| | |
|--------|--|
| AGEM | Applied Geosciences and Environmental Management |
| AMSL | above mean sea level |
| BGL | below ground level |
| °C | degree(s) Celsius |
| CCC | Commodity Credit Corporation |
| CD | compact disc |
| CLP | Contract Laboratory Program |
| COC | chain of custody |
| DOE | U.S. Department of Energy |
| ENVSYS | EnviroSystems, Inc., Columbia, Maryland |
| EPA | U.S. Environmental Protection Agency |
| ft | foot (feet) |
| gal | gallon(s) |
| GC-MS | gas chromatograph-mass spectrometer |
| gpm | gallon(s) per minute |
| hr | hour(s) |
| in. | inch(es) |
| KDHE | Kansas Department of Health and Environment |
| µg/kg | microgram(s) per kilogram |
| µg/L | microgram(s) per liter |
| µS/cm | microsiemen(s) per centimeter |
| mg/kg | milligram(s) per kilogram |
| mg/L | milligram(s) per liter |
| mi | mile(s) |
| min | minute(s) |
| mL | milliliter(s) |
| mV | millivolt(s) |
| NAD | North American Datum |
| NGVD | National Geodetic Vertical Datum |
| nM | nanomole(s) |
| ORP | oxidation-reduction potential |
| QA | quality assurance |
| QC | quality control |
| RPD | relative percent difference |

| | |
|------|--|
| RSK | Risk-Based Standards for Kansas |
| RWD | Rural Water District |
| SDG | sample delivery group |
| STL | Severn-Trent Laboratories, Colchester, Vermont |
| TOC | top of casing |
| USDA | U.S. Department of Agriculture |
| VOC | volatile organic compound |

Final Report: Groundwater Monitoring at Morrill, Kansas, in September 2005 and March 2006, with Expansion of the Monitoring Network in January 2006

Executive Summary

This document reports the results of groundwater monitoring in September 2005 and March 2006 at the grain storage facility formerly operated at Morrill, Kansas, by the Commodity Credit Corporation of the U.S. Department of Agriculture (CCC/USDA). These activities were the first and second twice yearly sampling events of the two-year monitoring program approved by the CCC/USDA and Kansas Department of Health and Environment (KDHE) project managers.

The monitoring network sampled in September 2005 consisted of 9 monitoring wells (MW1S–MW5S and MW1D [installed in the mid 1990s] and MW6S–MW8S [installed in 2004]), plus 3 private wells (Isch, Rillinger, and Stone). The groundwater samples collected in this first event were analyzed for volatile organic compounds (VOCs), dissolved hydrogen, and additional groundwater parameters to aid in evaluating the potential for reductive dechlorination processes.

After the monitoring in September 2005, Argonne recommended expansion of the initial monitoring network. Previous sampling (August 2004) had already suggested that the initial network was inadequate to delineate the extent of the carbon tetrachloride plume. With the approval of the CCC/USDA and KDHE project managers, the monitoring network was expanded in January 2006 through the installation of 3 additional monitoring wells (MW9S–MW11S). Details of the monitoring well installations are reported in this document.

The expanded monitoring network of 12 monitoring wells (MW1S–MW11S and MW1D) and 3 private wells (Isch, Rillinger, and Stone) was sampled in March 2006, the second monitoring event in the planned two-year program. Results of analyses for VOCs showed minor increases or decreases in contaminant levels at various locations but indicated that *the leading edge of the contaminant plume is approaching the intermittent stream* leading to Terrapin Creek.

The groundwater samples collected in March 2006 were also analyzed for additional groundwater parameters to aid in the evaluation of the potential for reductive dechlorination

processes. Preliminary screening of groundwater parameters provided *inadequate evidence that reductive dechlorination of carbon tetrachloride is taking place* at some locations on the former CCC/USDA property.

Groundwater levels measured manually in October 2005, March 2006, and June 2006 were used to map the potentiometric surface at Morrill. The results were generally consistent with each other and with previous measurements, indicating a *groundwater flow direction to the south-southeast from the former CCC/USDA facility*.

Data recorders installed in wells MW1S–MW8S in July 2004 are gathering long-term data on the groundwater elevation and gradient. Data downloaded in August 2004, March 2005, October 2005, and June 2006 indicate that *two relatively upgradient wells near the former CCC/USDA facility responded distinctly to apparent rainfall/recharge events*. In contrast, two downgradient wells south of the former facility showed virtually no response, probably because of the damping influence of the nearby surface drainages and shallow groundwater at their locations.

The first two monitoring events of the planned two-year monitoring program for Morrill have demonstrated no clear pattern of changes in carbon tetrachloride concentrations, though the contaminated zone has expanded toward the intermittent stream. Argonne recommends that *the monitoring program continue as approved and that surface water samples be collected in future monitoring events* (September 2006, March 2007, and September 2007).

1 Introduction

The city of Morrill, Kansas, is located in northwestern Brown County, in northeast Kansas, about 10 mi south of the Kansas–Nebraska border and about 65 mi north of Topeka, Kansas (Figure 1.1). Hiawatha, the Brown County seat, is about 10 mi southeast of Morrill (about 15 mi by road). The population of Morrill is approximately 277 (2000 Census). The Commodity Credit Corporation, U.S. Department of Agriculture (CCC/USDA) operated a grain storage facility in the western portion of Morrill from 1950 until 1971 (Figure 1.2). Under the terms of the lease termination agreement, all grain storage bins were left in place. Storage of grain at the site by the current owner, Mr. Carol E. Bailey, has continued to the present time.

Surface water drainage in the Morrill area is southward toward Terrapin Creek, an east-flowing intermittent stream south of town. Terrapin Creek is a tributary of Walnut Creek, which flows into the Big Nemaha River, a tributary of the Missouri River. No active surface water irrigation or municipal intakes lie within a 4-mi radius of Morrill (KDHE 1989).

This document reports the results of groundwater sampling in September 2005 and March 2006 at the grain storage facility formerly operated by the CCC/USDA in Morrill. These activities were the first and second twice yearly sampling events of the planned two-year monitoring program at this site (Argonne 2005a).

The activities reported here were conducted as part of an ongoing environmental investigation being conducted by the Environmental Science Division of Argonne National Laboratory. Argonne is a nonprofit, multidisciplinary research center operated by the University of Chicago for the U.S. Department of Energy (DOE). Under an interagency agreement between DOE and the USDA, Argonne provides technical assistance to the CCC/USDA with environmental site characterization and remediation at its former grain storage facilities.

1.1 Background

Carbon tetrachloride contamination was first detected at Morrill in 1985 during statewide sampling of public water supply wells for volatile organic compounds (VOCs). In 1989, the Kansas Department of Health and Environment (KDHE) conducted a preliminary investigation of the groundwater contamination at Morrill (KDHE 1989). Carbon tetrachloride was detected in public well PWS5 at 184 µg/L and in a private lawn and garden well east of PWS5 at 22.1 µg/L.

In 1994–1996, GeoCore Services, Inc., conducted an investigation during which six monitoring wells — five shallow (MW1S–MW5S) and one deep (MW1D) — were installed (GeoCore 1994a–d, 1996). Subsequent annual monitoring of these wells in 1998–2000, plus the regional geologic and hydrogeologic setting, indicated that the former CCC/USDA facility might be a source for the carbon tetrachloride plume extending south-southeast from the former facility toward Terrapin Creek (KDHE 2000). The details of the KDHE investigation and a summary of the findings were reported previously (Argonne 2003).

Use of the Morrill public water supply wells for potable water was discontinued in 1991 because of nitrate contamination going back to the 1920s, in addition to the carbon tetrachloride contamination. By 1980, Morrill was obtaining some of its water from the Brown County Rural Water District No. 1 (RWD 1). In 1988, nitrate levels in the RWD 1 water began to exceed the allowable limit. In 1991, the Morrill public system was connected to the Sabetha municipal system (Argonne 2003).

In October 2003, Argonne (on behalf of the CCC/USDA) initiated an investigation of the former CCC/USDA grain storage facility (Argonne 2004a). The primary goals were to (1) verify any association of carbon tetrachloride with the former CCC/USDA facility; (2) verify the contaminant migration pathway from the former facility; and (3) identify any domestic wells outside the city limits that are downgradient from and within 1 mi of the former CCC/USDA facility. As part of the 2003 investigation, vertical-profile soil sampling to a depth of approximately 15 ft below ground level (BGL) or bedrock (whichever was encountered first) was conducted at 16 locations across the former facility. Groundwater sampling of the existing monitoring wells was also conducted, as was surface water sampling along Terrapin Creek.

In May 2004 field work (Argonne 2004b,c), three additional monitoring wells (MW6S, MW7S, and MW8S) were installed along the southwestern and southern extent of the contaminant plume. In June 2004, the nine monitoring wells (MW1S–MW8S, and MW1D) and numerous private wells within and downgradient of the city limits were sampled (Argonne 2005b). The principal findings of the 2004 activities and the 2003 Phase I–Phase II interim investigation were as follows:

1. The absence of detectable levels of either carbon tetrachloride or chloroform above 10 $\mu\text{g/kg}$ (the method quantitation limit) in soils to depths of 13–15 ft BGL indicated that no unacceptable human health risk was associated with either carbon tetrachloride or chloroform in shallow soils at the former

CCC/USDA facility. Furthermore, these analytical results for soil samples collected in October 2003 indicated that no continuing soil source of carbon tetrachloride existed at the former facility.

2. Carbon tetrachloride in groundwater at concentrations in excess of the Risk-Based Standards for Kansas (RSK) level of 5 µg/L extended downgradient from the former CCC/USDA facility (Figures 1.3 and 1.4). In addition, the presence of chloroform in the groundwater suggested that biological degradation of the carbon tetrachloride was taking place in the aquifer unit.
3. Two aquifer zones identified in the vicinity of the former facility — the Grenola limestone and Roca shale above 1,065 ft above mean sea level (AMSL) and the deeper Long Creek limestone member of the Foraker limestone (below 1,065 ft AMSL) — were shown to be geochemically distinguishable on the basis of variations in sulfate and nitrate content.
4. The most likely contaminant pathway was inferred to involve (1) vertical infiltration of carbon tetrachloride from the land surface through the vadose zone to the water table, followed by (2) subhorizontal south-southeastward lateral migration within the Grenola limestone–Roca shale in response to the prevailing hydraulic gradient. The contaminant plume was considered to be approaching Terrapin Creek, which serves as a groundwater drainage divide that would limit the potential southward migration of contaminated groundwater.
5. The city of Morrill obtained its water by pipeline from the municipal water supply of Sabetha and supplied drinking water to all residences in the general vicinity of the existing groundwater plume.
6. No domestic drinking water wells were impacted. Four domestic wells were identified outside the Morrill city limits and downgradient from and within 1 mi of the former CCC/USDA facility (south of Terrapin Creek): the Isch well, the Snyder well, the Kent Grimm well, and the Rodney Grimm well (Figure 1.4).

These findings resulted in the recommendation to implement a program of twice yearly groundwater monitoring to collect the data necessary to determine the rate of plume migration and confirm that *in situ* degradation of carbon tetrachloride is occurring.

In August 2005, Argonne developed a groundwater monitoring plan involving twice yearly monitoring at Morrill for at least two years (Argonne 2005a). After sampling in September 2005, Argonne recommended expansion of the monitoring network, per agreement between the CCC/USDA and KDHE project managers, to facilitate the tracking of plume migration along the western portion of the plume (Argonne 2005c,d).

1.2 The 2005–2006 Sampling Activities and the 2006 Network Expansion

On September 12–14, 2005, the initial monitoring network (MW1S–MW8S, MW1D, and three private wells) at Morrill was sampled, in accordance with the approved monitoring plan (Argonne 2005a). The second monitoring event on March 19–23, 2006, sampled a monitoring network that had been expanded in January 2006 (Argonne 2005c and Section 2.1 of the current report) through the installation of three additional monitoring wells (MW9S–MW11S).

Procedures for sampling and well installation are described in Section 2. The results of both the September 2005 and March 2006 sampling events are reported in Section 3.

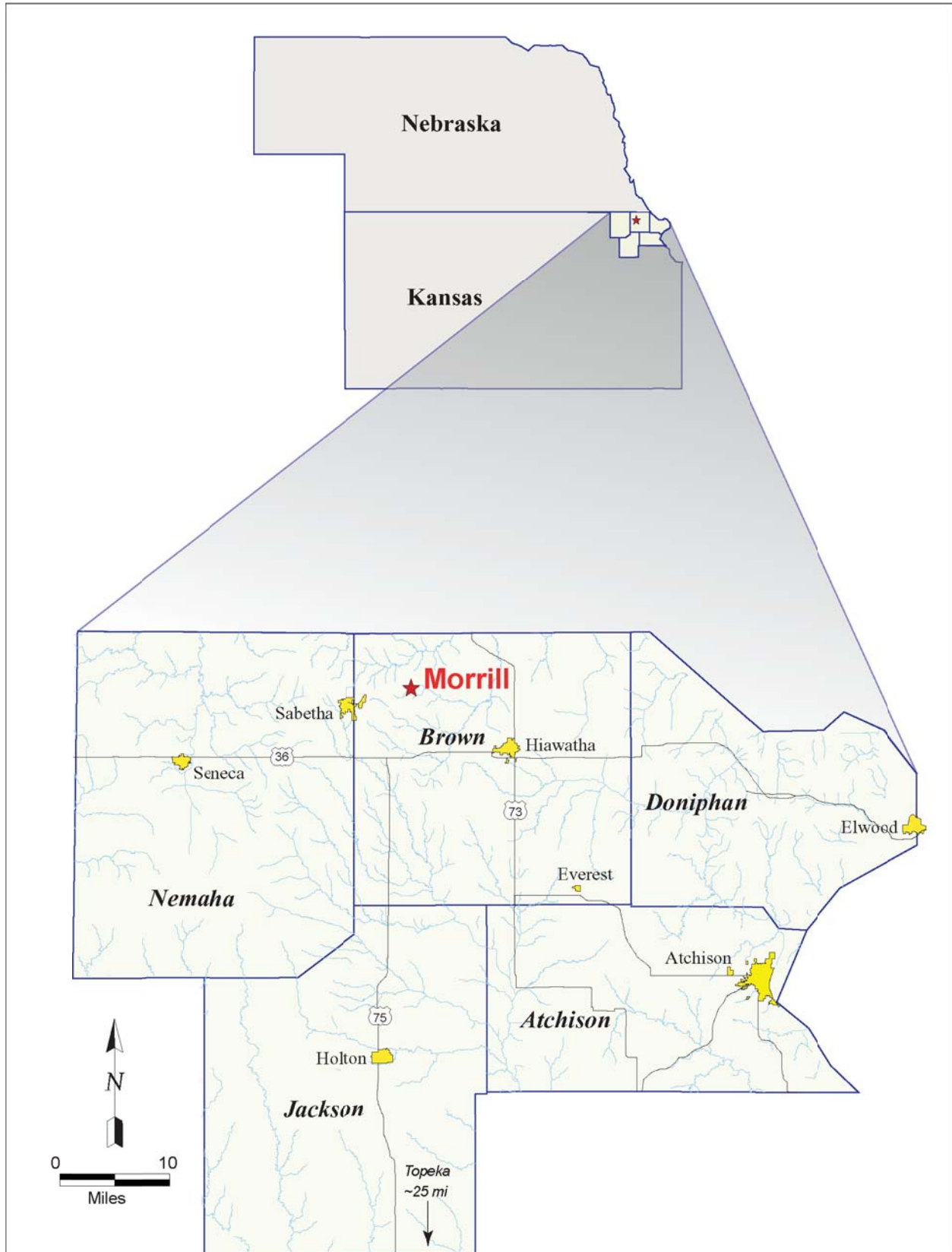


FIGURE 1.1 Location of Brown County and Morrill, Kansas.

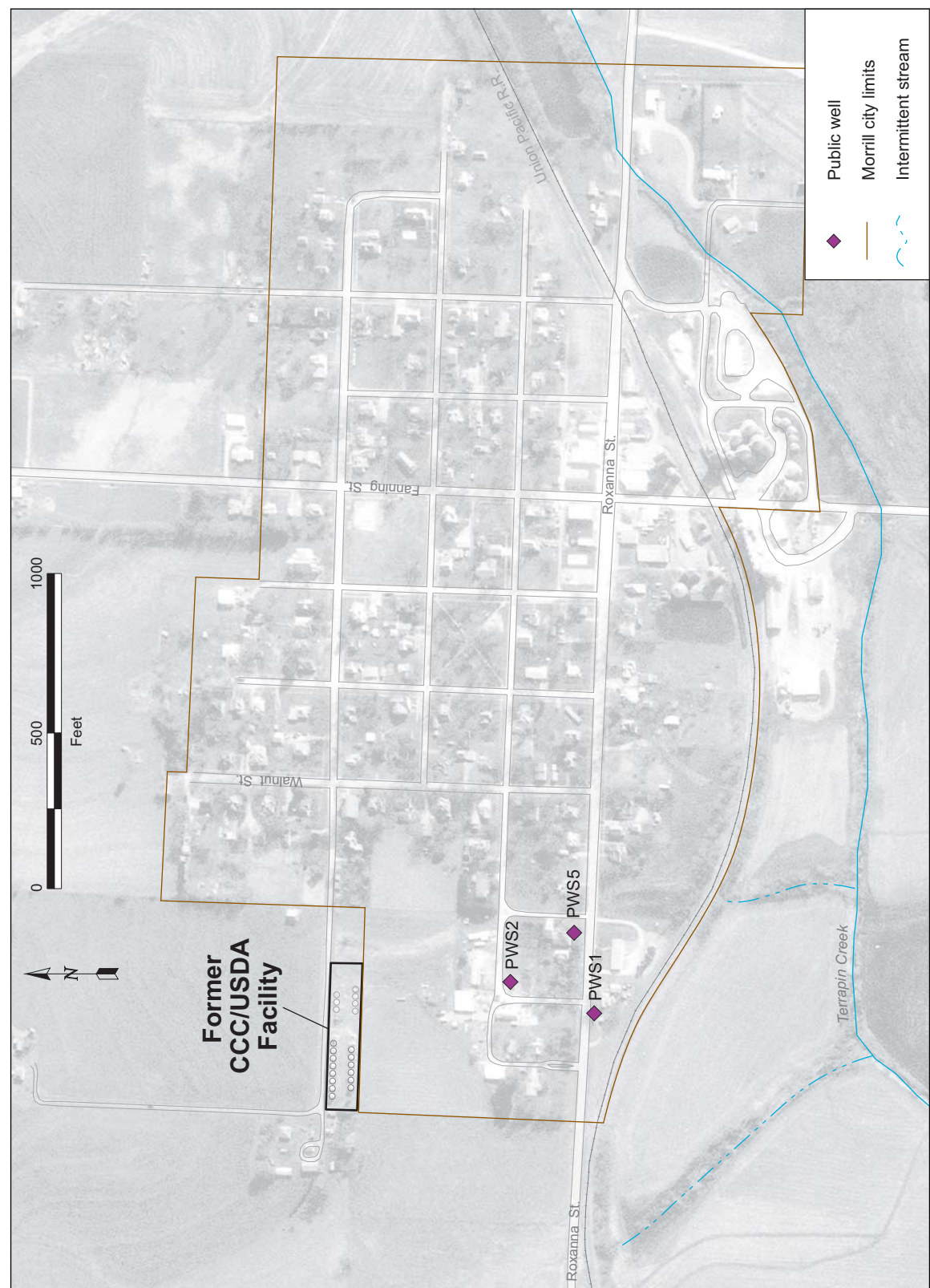


FIGURE 1.2 Locations of the former CCC/USDA grain storage facility and public wells at Morrill. Source of photograph: USDA 1999.

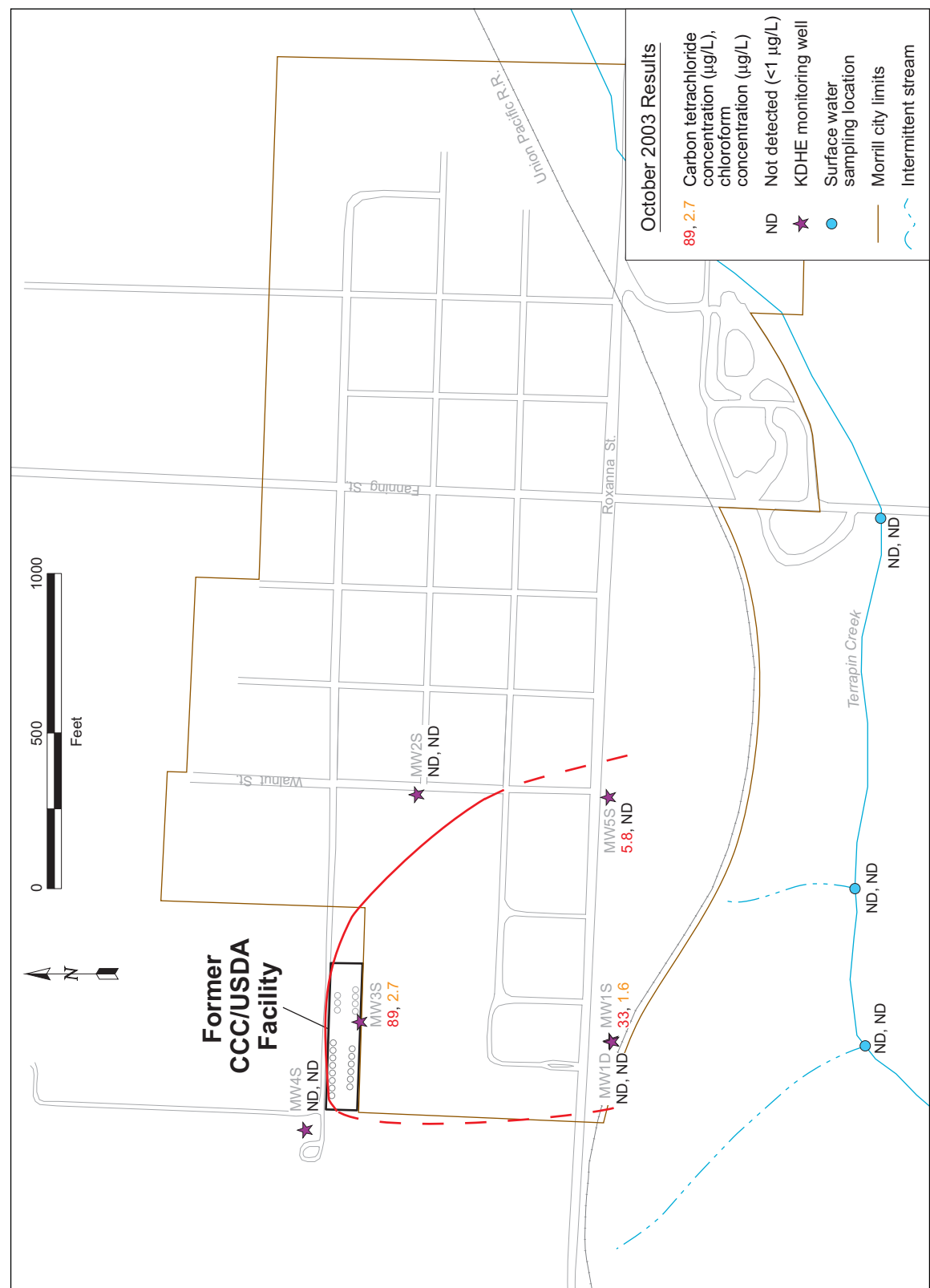


FIGURE 1.3 Interpreted distribution of carbon tetrachloride in groundwater at Morrill in October 2003.

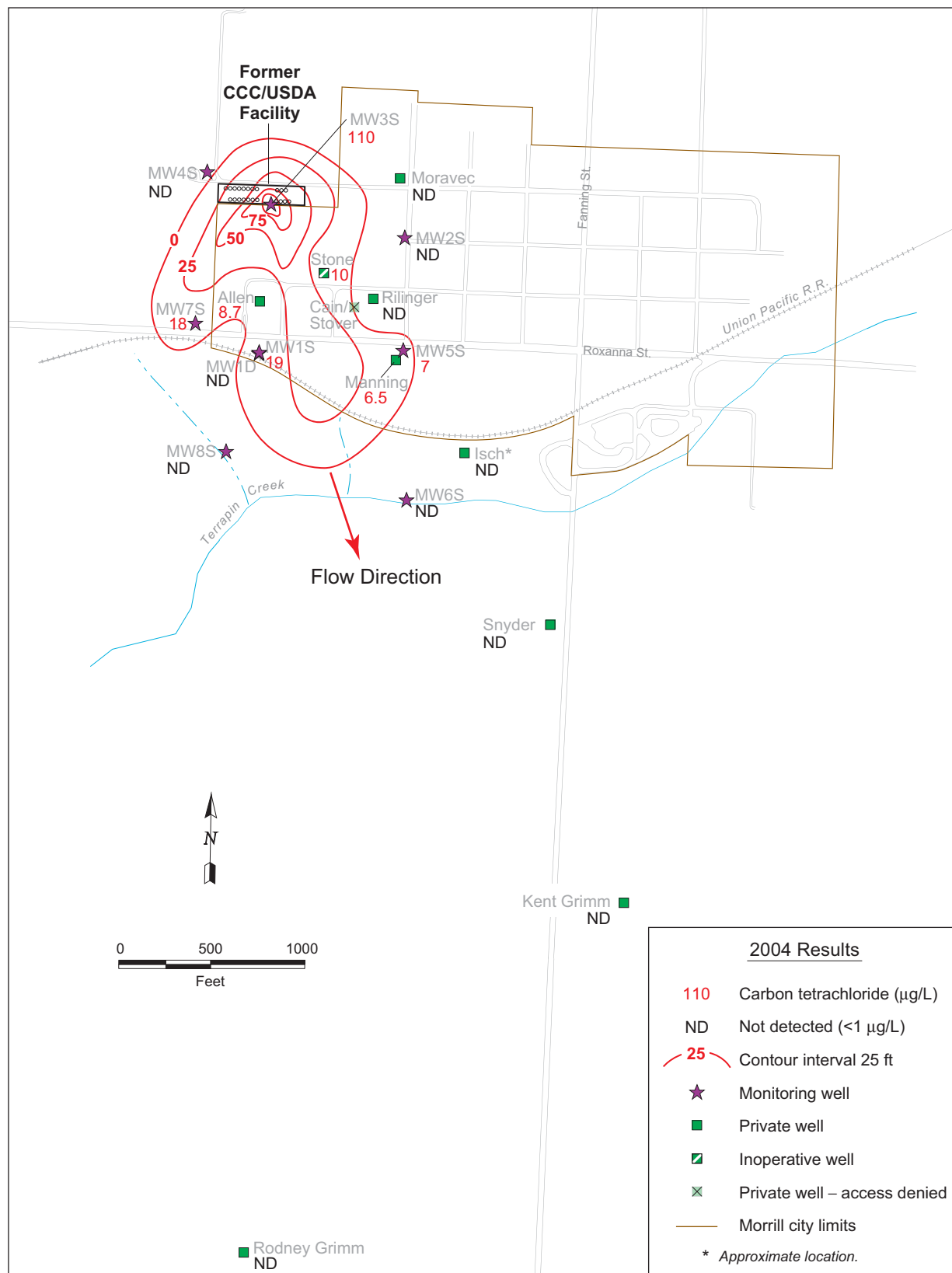


FIGURE 1.4 Interpreted distribution of carbon tetrachloride in groundwater at Morrill in 2004.

2 Field Activities

2.1 Monitoring Wells

Argonne installed three monitoring wells, MW9S–MW11S, in January 2006. The locations of these new wells and the remainder of the monitoring network are shown in Figure 2.1. The 2006 network expansion was intended to track carbon tetrachloride migration along the western portion of the plume. Construction diagrams and the well registration forms for the new monitoring wells are in Appendix A.

2.1.1 Well Installation in January 2006

The three new monitoring wells (MW9S–MW11S) were installed in January 2006 according to the general procedures in Section 6.4.3 of the *Master Work Plan* (Argonne 2002), in addition to site-specific procedures (Argonne 2006a). The screen intervals were adjusted to be representative of the same general thickness of the aquifer as is sampled in monitoring wells MW1S–MW8S. The new wells consist of 2-in. polyvinyl chloride casing installed in 8.25-in.-diameter boreholes. The boreholes were drilled by Boart Longyear with a hollow-stem-auger drill rig. Screens consist of 0.010-slot screen with a 10/20 sand filter pack. The bottom of each well consists of a 5-ft section of blank casing to serve as a silt trap.

Specific details about well construction are in Table 2.1.

TABLE 2.1 Construction details for monitoring wells MW9S–MW11S at Morrill, Kansas.

| Well | Surveyed Elevation for Top of Casing (ft AMSL) | Depth (ft BGL) | | |
|-------|--|-------------------------|--------------------|-------|
| | | Filter Pack Interval | Screen Interval | Total |
| MW9S | 1118.31 | 36–58.83 | 38.83–53.83 | 58.83 |
| MW10S | 1110.78 | 27–50 | 30–45 | 50 |
| MW11S | 1133.08 | 50–73 | 53–68 | 73 |

2.1.2 Completion and Development of Wells in January–February 2006

All wells were completed in accordance with applicable KDHE guidelines and site-specific procedures (Argonne 2006a). Surface completions for the monitoring wells consist of KDHE-approved flush mounts, as shown in the specifications for a 2-in. casing in Figure F.4, Appendix F, of the *Master Work Plan* (Argonne 2002). The appropriate variances were obtained from the state of Kansas for the flush-mount completions. Completion details for wells MW9S–MW11S are in Appendix A.

The wells were developed by surging and bailing for 2 hr and then pumping with an electric submersible pump. Development water was placed in plastic storage tanks at the investigation site. Waste characterization, handling, and disposal are discussed in Section 3.5.

2.2 Sampling of Monitoring Wells in September 2005 and March 2006

After measurement of water levels, wells were purged of a minimum three well volumes. Field measurements of temperature, pH, and conductivity were taken during purging until the measurements stabilized. Per the monitoring plan, field measurements of carbon dioxide, iron(II), dissolved oxygen, and oxidation reduction potential (ORP) were made for the evaluation of possible biodegradation processes. The sequence of activities in the September 2005 and March 2006 field events is summarized in Appendix B.

In September 2005, existing wells MW1S–MW8S and MW1D, plus three private wells, were sampled, according to procedures in the *Master Work Plan* (Argonne 2002). In March 2006, wells MW1S–MW8S and MW1D and the three private wells were sampled again, and new wells MW9S–MW11S were also sampled (Argonne 2006b). In both September 2005 and March 2006, the samples were subjected to off-site laboratory analyses for VOCs and for other groundwater parameters to aid in the evaluation of reductive dechlorination processes (EPA 1998a; ITRC 2002).

In each sampling event, immediately after collection in the appropriate laboratory containers, the groundwater samples were labeled, packaged, and chilled to 4°C by placement in an ice-filled cooler. The samples were shipped for overnight delivery to the Applied Geosciences and Environmental Management (AGEM) Laboratory at Argonne for VOCs analyses with

U.S. Environmental Protection Agency (EPA) Method 524.2 (EPA 1995). In addition, aliquots for laboratory analyses of degradation parameters were collected and shipped to Severn-Trent Laboratories, Colchester, Vermont. The analyses included dissolved chloride, sulfate, nitrate, and phosphate concentrations by EPA Method 300; total alkalinity by EPA Method 310.1; nitrate/nitrite nitrogen by EPA Method 353.2; nitrite nitrogen by EPA Method 354.1; sulfide by EPA Method 376.2; total organic carbon by EPA Method 415.1; and dissolved metals (aluminum, calcium, iron, magnesium, manganese, phosphorus, potassium, silicon, sodium, and zinc) by EPA Method 6010 (EPA 1998b). Analyses for the natural attenuation indicators methane, ethane, and ethene were conducted with Method RSK-175 (Kampbell and Vandegrift 1998).

In the September 2005 monitoring, additional groundwater samples were collected from selected wells for dissolved hydrogen analysis at Microseeps Laboratory, Pittsburgh, Pennsylvania, by Method AM20GAX.

The analytical results are summarized in Section 3.2.

2.3 Measurement of Groundwater Levels

Before the wells were purged in September 2005 and in March 2006, the depth to groundwater and the total depth of each well were measured to within 0.01 ft from the top of the well casing by using a water level indicator.

Data recorders installed in MW1S–MW8S in July 2004 are gathering long-term data on the groundwater elevation and gradient. The data recorders were downloaded on August 31, 2004; March 18, 2005; October 17, 2005; and June 16, 2006.

Groundwater level data are discussed in Sections 3.3 and 4.1.

2.4 Quality Control for Sample Collection, Handling, and Analysis

Quality assurance/quality control (QA/QC) procedures for sample collection, handling, and analysis are described in detail in the *Master Work Plan* (Argonne 2002). Significant points for the work at Morrill include the following:

- Sample integrity was preserved during sample collection, shipping, and analysis through the use of custody seals and chain-of-custody records.
- Field blanks, equipment rinsates, and trip blanks were used to evaluate sample collection and handling activities.
- In addition to the primary samples, four blind replicate samples were collected for organic analysis by the AGEM Laboratory, and two samples were selected for verification organic analysis at a secondary laboratory.

Results of the QA/QC activities are summarized in Section 3.4.

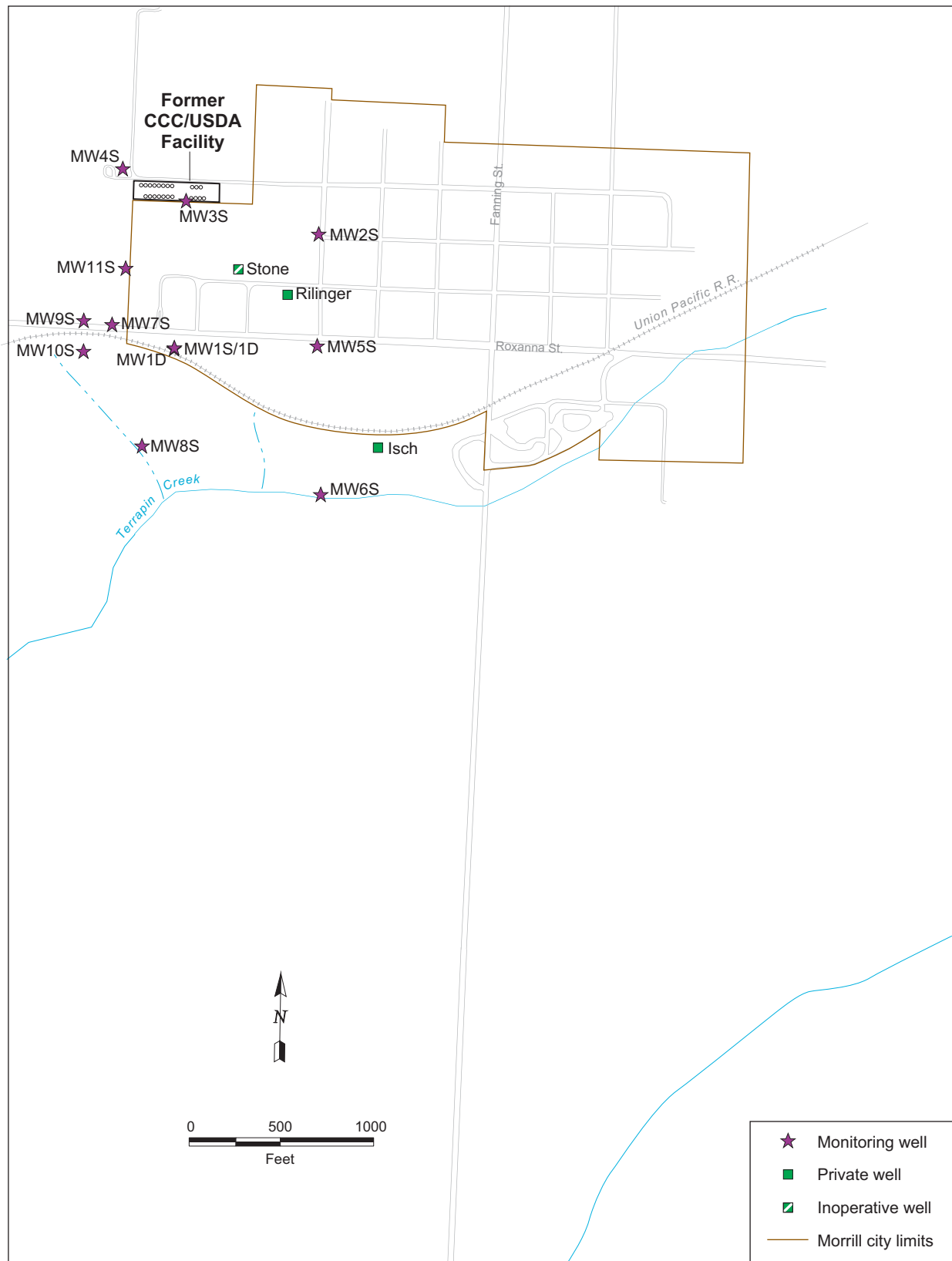


FIGURE 2.1 Monitoring network at Morrill, as of March 2006.

3 Field and Laboratory Data

3.1 Coordinates Survey Data

To provide horizontal and vertical control for water level monitoring, the three newly installed monitoring wells (MW9S–MW11S) were surveyed by Schwab-Eaton, P.A., Manhattan, Kansas. Elevations of the ground surface and the tops of the casings were surveyed. Coordinates survey data for the monitoring wells are in Appendix C, Table C.1.

3.2 Analytical Data for Groundwater

In September 2005, groundwater samples were collected from monitoring wells MW1S–MW8S and MW1D, as well as from three private wells. In March 2006, after expansion of the monitoring network in January 2006, groundwater samples were collected from monitoring wells MW1S–MW11S and MW1D, as well as from the three private wells. Descriptions of the samples are in Supplement 1, Table S1.1. (Supplements 1–4 are on compact disc [CD] inside the back cover of this report.)

3.2.1 Field Measurements

Field measurements of temperature, pH, electrical conductivity, dissolved oxygen, ORP, carbon dioxide, and iron(II) were made during collection of groundwater samples in both September 2005 and March 2006. The results are in Supplement 1, Table S1.2 (on CD).

3.2.2 Contaminant Data

The analytical data for VOCs and nitrate in groundwater samples collected in the September 2005 and March 2006 sampling events (as well as the results from the previous sampling in June 2004) are summarized in Table 3.1. Complete results are in Supplement 1, Table S1.3 (VOCs) and Table S1.4 (nitrate). (Supplement 1 is on CD.)

TABLE 3.1 Concentrations of volatile organic compounds and nitrate in groundwater samples collected at Morrill in 2004, 2005, and 2006.

| Location | Depth (ft BGL) | Sample Type ^a | Sample Date | Concentration (µg/L) | | | Nitrate (mg/L) |
|----------|-------------------|-----------------------------|----------------|-------------------------|--------------------|-----------------------|-------------------|
| | | | | Carbon Tetrachloride | Chloroform | Methylene Chloride | |
| MW1S | 11–51 | MW | 6/2/04 | 19 | 0.9 J ^b | ND ^c | 11.2 |
| | | | 9/13/05 | 35 | 1.7 | ND | 14.2 |
| | | | 3/22/06 | 40 | 1.8 | ND | 15.2 |
| MW1D | 63–88 | MW | 6/2/04 | ND | ND | ND | < 0.2 |
| | | | 9/13/05 | ND | ND | ND | NA |
| | | | 3/19/06 | ND | ND | 0.4 J B ^d | NA |
| MW2S | 13–53 | MW | 6/2/04 | ND | ND | ND | 16.2 |
| | | | 9/14/05 | ND | ND | ND | 18.2 |
| | | | 3/21/06 | ND | ND | ND | 25.4 |
| MW3S | 18–48 | MW | 6/2/04 | 110 | 3.2 | ND | 10.1 |
| | | | 9/13/05 | 101 | 3.2 | ND | 13.5 |
| | | | 3/23/06 | 91 | 2.6 | ND | 15.2 |
| MW4S | 17–47 | MW | 6/4/04 | ND | ND | ND | 18.9 |
| | | | 9/14/05 | ND | ND | ND | 20.8 |
| | | | 3/21/06 | ND | ND | ND | 16.2 |
| MW5S | 15–55 | MW | 6/2/04 | 7 | ND | ND | 19.5 |
| | | | 9/13/05 | 6.3 | 0.2 J | ND | 18.3 |
| | | | 3/22/06 | 7.3 | 0.2 J | ND | 22.0 |
| MW6S | 10–25 | MW | 6/3/04 | ND | ND | ND | 0.339 |
| | | | 9/14/05 | ND | ND | ND | < 0.4 |
| | | | 3/20/06 | ND | ND | ND | 0.321 |
| MW7S | 20–45 | MW | 6/3/04 | 18 | ND | ND | 16.7 |
| | | | 9/12/05 | 43 | 1.1 | ND | 18.0 |
| | | | 3/22/06 | 21 | 0.4 J | ND | 19.8 |
| MW8S | 10–25 | MW | 6/3/04 | ND | ND | ND | 5.85 |
| | | | 9/14/05 | 0.9 J | ND | ND | 10.4 |
| | | | 3/20/06 | 0.6 J | ND | 0.4 J B | 8.97 |
| MW9S | 38.83–53.83 | MW | 3/22/06 | ND | ND | ND | 0.349 |
| MW10S | 30–45 | MW | 3/21/06 | ND | ND | ND | 0.357 |

TABLE 3.1 (Cont.)

| Location | Depth (ft BGL) | Sample Type ^a | Sample Date | Concentration (µg/L) | | Methylene Chloride | Nitrate (mg/L) |
|-----------|-------------------|-----------------------------|----------------|-------------------------|------------|-----------------------|-------------------|
| | | | | Carbon Tetrachloride | Chloroform | | |
| MW11S | 53–68 | MW | 3/22/06 | 39 | 0.9 J | ND | 21.8 |
| Isch | Unk ^e | DW | 2/19/04 | ND | ND | ND | NA |
| | | | 9/14/05 | ND | ND | ND | NA |
| | | | 3/23/06 | ND | ND | ND | NA |
| Rillinger | Unk | DW | 6/4/04 | ND | ND | ND | 0.348 |
| | | | 9/14/05 | 2.6 | 0.1 J | ND | NA |
| | | | 3/19/06 | ND | ND | 0.4 J B | NA |
| Stone | Unk–43 | DW | 6/4/04 | 10 | ND | ND | 10.6 |
| | | | 9/14/05 | 2.6 | 0.3 J | ND | NA |
| | | | 3/19/06 | 14 | 0.8 J | 0.4 J B | NA |

^a Sample types: DW, domestic well; MW, monitoring well.

^b Qualifier J indicates an estimated concentration below the method quantitation limit of 1.0 µg/L.

^c ND, not detected at the instrument detection limit of 0.1 µg/L.

^d Qualifier B indicates that the compound was present in the method blank.

^e Unk, unknown depth.

The October 2003 and June 2004 results for carbon tetrachloride are shown in Figures 1.3 and 1.4, respectively. The September 2005 and March 2006 results for carbon tetrachloride are in Figures 3.1 and 3.2, respectively. The March 2006 results for chloroform and nitrate are in Figures 3.3 and 3.4, respectively.

3.2.3 Groundwater Characterization Data

The groundwater samples collected from the monitoring network in September 2005 and March 2006 were analyzed for multiple characterization parameters. Complete analytical results are in Supplement 1, Table S1.4 (on CD).

3.3 Groundwater Level Data

Depths to groundwater were measured manually in all available monitoring wells on July 15, 2004; August 31, 2004; March 18, 2005; September 12–14, 2005 (during sampling); October 17, 2005; March 19–23, 2006 (during sampling); and June 16, 2006. The hand-measured water level data are in Supplement 2, Table S2.1 (on CD). Long-term-recording transducers were installed in monitoring wells MW1S–MW8S in July 2004. Data for the period July 15, 2004, through June 16, 2006, are in Supplement 2, Table S2.2. These data were analyzed to evaluate the groundwater gradient and assess the magnitude of seasonal variations. The results are interpreted in Section 4.1.

3.4 Results of Quality Control Activities

The QA/QC procedures followed during collection, handling, and analysis of soil and groundwater samples are described in detail in the *Master Work Plan* (Argonne 2002) and the monitoring plan (Argonne 2005a). A detailed QA/QC report addressing activities related to sample collection, handling, and analysis during the September 2005 and March 2006 sampling events is in Supplement 3 (on CD). Chain-of-custody forms and analytical data from reference laboratories are in Supplement 4 (also on CD).

Results of the QA/QC activities are summarized as follows:

- Samples shipped to the AGEM Laboratory were received with custody seals intact and at the appropriate temperature. All samples were analyzed within required holding times. Analyses of field blanks, equipment rinsates, and trip blanks indicated that cross-contamination of samples did not occur during sample collection and handling. Carbon tetrachloride and chloroform, the contaminants of concern in the investigation, were not detected in laboratory method blanks analyzed with the samples.
- Monitoring samples were analyzed for VOCs at the AGEM Laboratory by the purge-and-trap method with a gas chromatograph-mass spectrometer (GC-MS) system. The compounds eluting from the GC column were identified by retention time and by comparison with reference library spectra. The concentration of each component was calculated by comparison of the MS

response for the quantitation ion to corresponding calibration curves, the responses for internal standards, or both. The internal standard recovery limits were 80–120%. Calibration checks with each sample delivery group (SDG) were required to be within $\pm 20\%$ of the standard.

- Blind replicate groundwater samples were analyzed at the AGEM Laboratory as a measure of consistency in the sampling and analytical methodologies. Consistency in both methodologies is indicated by the average relative percent difference (RPD) values of 16.4% for carbon tetrachloride and 12.5% for chloroform in dual analyses with the contaminants present.
- Two groundwater samples, including a sample from well MW3S (downgradient of the former CCC/USDA facility) and well MW11S (downgradient and along the western portion of the plume) were also analyzed for VOCs according to the EPA's Contract Laboratory Program (CLP) methodology by EnviroSystems, Inc., of Columbia, Maryland. Results were as follows:
 - Agreement between the two laboratories was acceptable, although for both samples higher carbon tetrachloride concentrations were reported by AGEM Laboratory than by EnviroSystems.
 - The sample from MW3S, which has consistently had the highest level of carbon tetrachloride contamination during long-term monitoring, was analyzed at the AGEM Laboratory with a concentration of 91 $\mu\text{g/L}$ and by EnviroSystems with a concentration of 62 $\mu\text{g/L}$, for an RPD value of 37.9%.
 - Similarly, the sample from the newly installed downgradient monitoring well MW11S was analyzed at the AGEM Laboratory with a concentration of 39 $\mu\text{g/L}$ and by EnviroSystems with a concentration of 26 $\mu\text{g/L}$, for an RPD value of 26%.
- The results for attenuation parameters in groundwater samples sent to Severn-Trent are acceptable for evaluation of biodegradation processes on the basis of

the recovery of known concentrations of the analytes of interest in laboratory QC samples analyzed with the groundwater samples.

- The results for dissolved hydrogen analysis of groundwater samples at Microseeps Laboratory are accepted because the associated trip blank contained no dissolved hydrogen.

3.5 Waste Characterization, Handling, and Disposal

Purge water from wells historically containing carbon tetrachloride at concentrations exceeding the RSK level of 5 µg/L was held in containers on-site. Wastewater from the September 2005 monitoring event was taken to the publicly owned treatment works at Sabetha, Kansas. A sample of the wastewater from the January–March 2006 activities was analyzed by M.D. Chemical and Testing, Inc., Topeka, Kansas, on June 15, 2006. No volatile organic compounds were detected (Supplement 5, on CD). The drummed wastewater was discharged to the ground on June 20, 2006.

Four drums of potentially contaminated subsurface soil cuttings from the Morrill well installations were stored pending analysis and disposal. Neither carbon tetrachloride nor chloroform was detected at a detection limit of 0.05 mg/kg in a composite sample analyzed by M.D. Chemical and Testing, Inc., on June 7, 2006 (Supplement 5, on CD). In accordance with KDHE special waste disposal authorization 06-0581, the soil cuttings were taken to the Rolling Meadows landfill on June 20, 2006, for disposal.

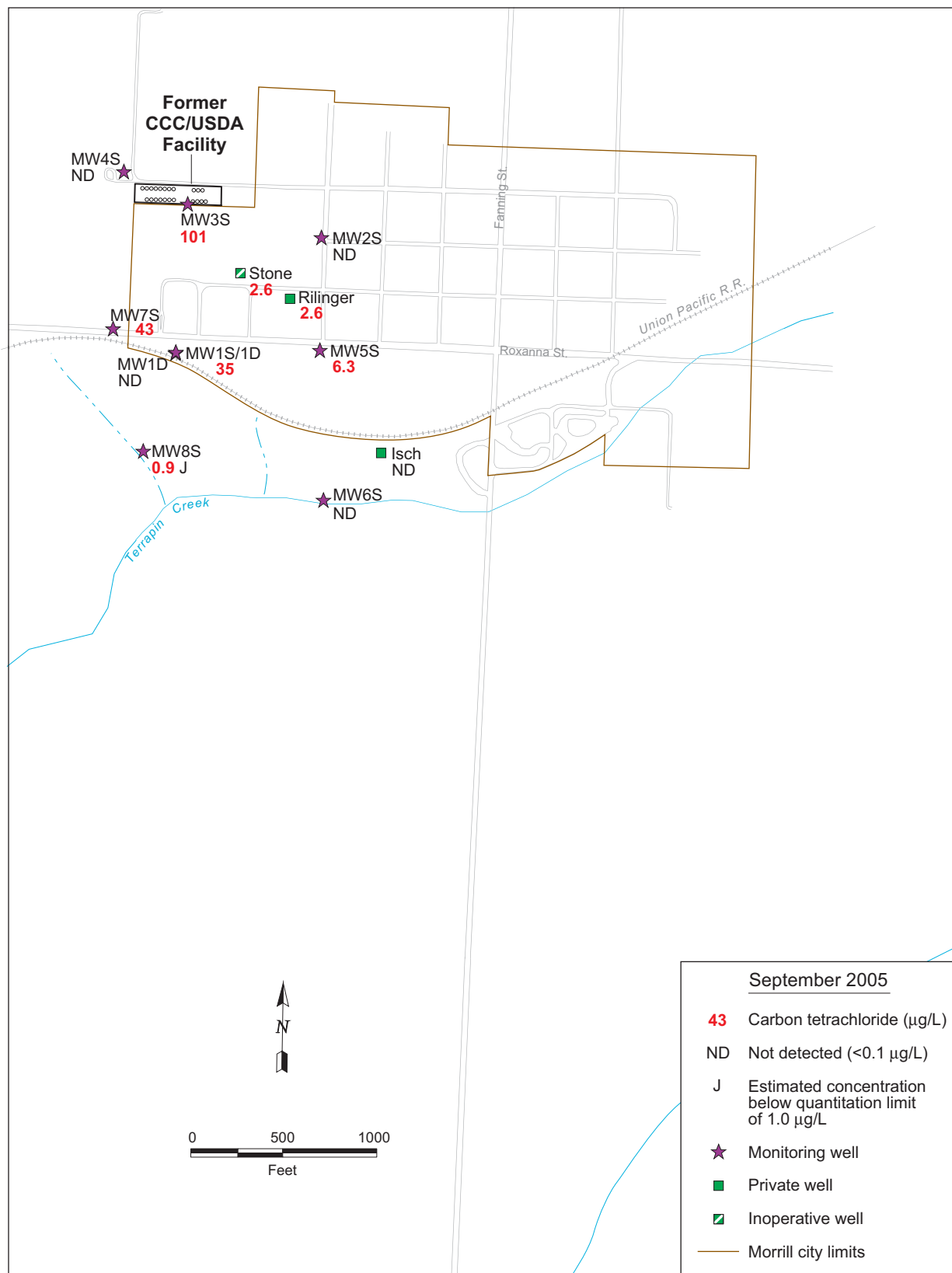


FIGURE 3.1 Carbon tetrachloride levels in groundwater at Morrill, September 2005.

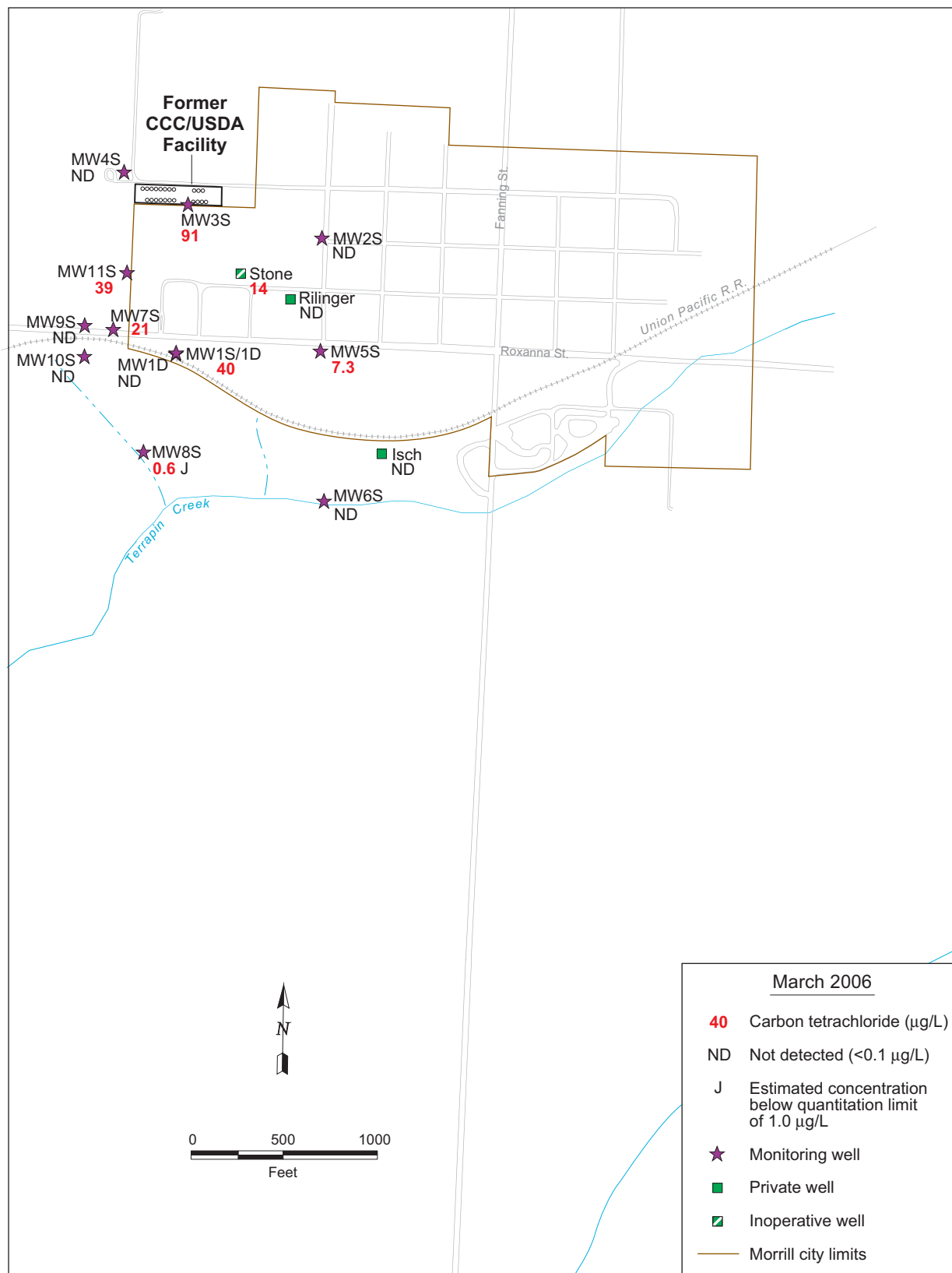


FIGURE 3.2 Carbon tetrachloride levels in groundwater at Morrill, March 2006.

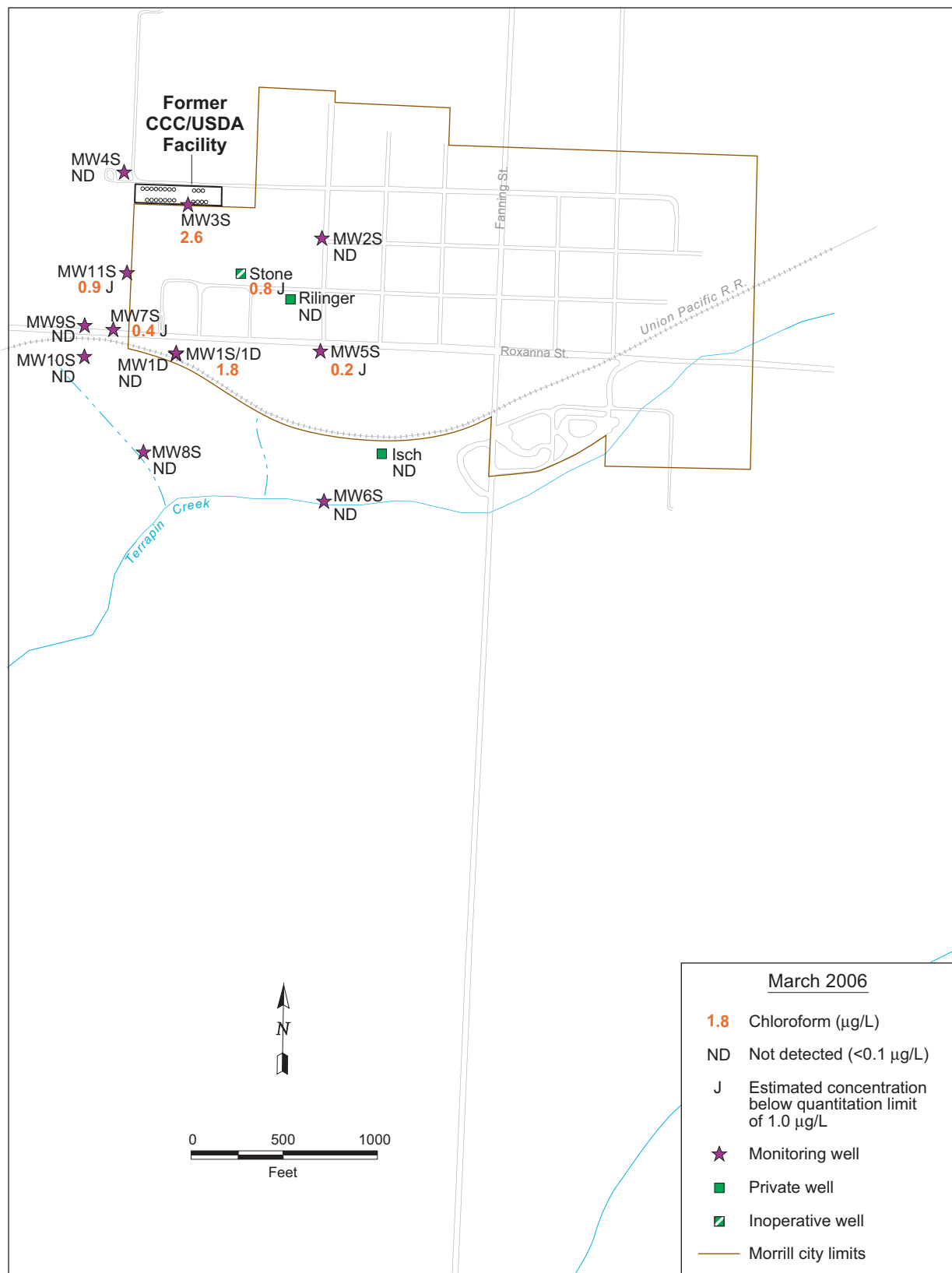


FIGURE 3.3 Chloroform levels in groundwater at Morrill, March 2006.

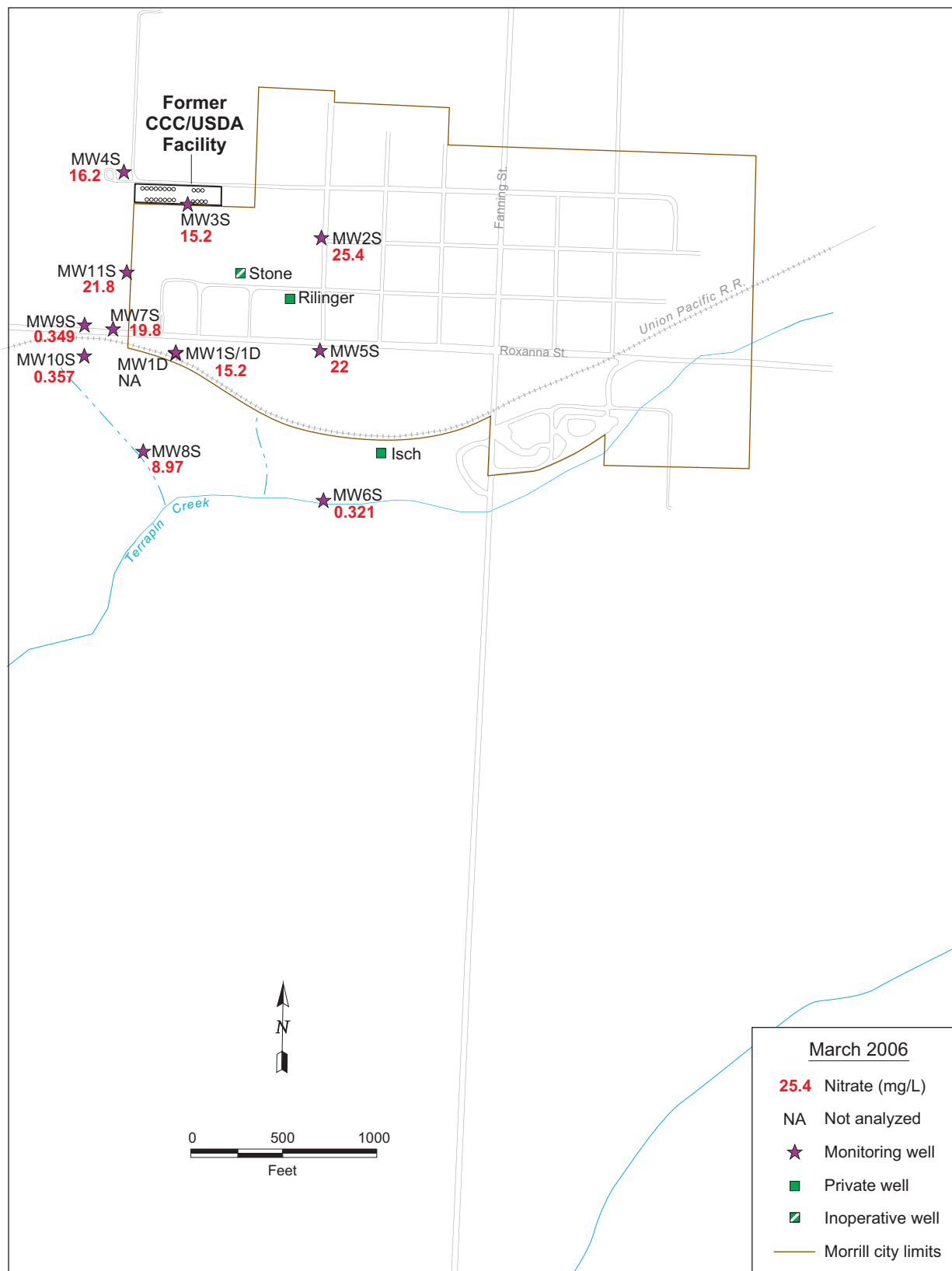


FIGURE 3.4 Nitrate levels in groundwater at Morrill, March 2006.

4 Interpretation of Field and Laboratory Data

4.1 Groundwater Level Data

The potentiometric surface at Morrill, based on manual measurements on October 17, 2005, March 19–23, 2006, and June 16, 2006, is depicted in Figures 4.1, 4.2, and 4.3, respectively. Overall, the recent results are consistent with each other and with previous measurements (Figure 4.1 in Argonne 2005b), indicating a groundwater flow direction toward the south from the former CCC/USDA facility. The apparent low water level at MW11S on June 16, 2006 (Figure 4.3) empirically suggests the presence of a groundwater “sink” southwest of the former CCC/USDA facility. This apparent feature will be investigated in future monitoring events.

The results of long-term water level monitoring in wells MW1S–MW8S, from July 15, 2004, to June 16, 2006, are summarized in Figure 4.4. The water level traces show a general seasonal pattern of recharge and water level rise during the spring and early summer, then a fairly steady decline during the rest of the year. Prominent responses to individual recharge events are especially apparent for well MW3S (just downgradient of the former CCC/USDA facility) and to a lesser degree for well MW2S. The trace for MW4S shows a large seasonal variation in water level but not the spikes observed in most other wells. The traces for MW6S and MW8S show the least variation over time, probably because of their positions in shallow groundwater along the surface drainages. The “drawdown” spikes at MW1S in May 2006 (Figure 4.4) suggest pumping events at nearby well PWS1 (location shown in Figure 1.2) for nonpotable uses. The cause for the apparent “drawdown” spike at MW8S, lasting more than 4 hr, is unknown at present. Continued monitoring will provide further information.

4.2 Delineation of Contaminants in Groundwater

4.2.1 Carbon Tetrachloride Concentrations and Distribution

In the September 2005 sampling (Figure 3.1), carbon tetrachloride was detected at 7 of the 12 monitoring locations, at concentrations ranging from $< 1 \mu\text{g/L}$ (1 location) to a maximum of $101 \mu\text{g/L}$ at well MW3S. This concentration at MW3S is far above the RSK value of $5 \mu\text{g/L}$,

though it represents a slight decrease from the previous value of 110 µg/L at MW3S in June 2004. Trace levels of carbon tetrachloride (< 1 µg/L) were detected in MW8S, near an intermittent stream upgradient from Terrapin Creek.

In March 2006 (Figure 3.2), carbon tetrachloride was detected at 7 of 15 monitoring locations, at concentrations ranging from < 1 µg/L (1 location) to a maximum of 91 µg/L at well MW3S. Carbon tetrachloride was detected in new well MW11S, downgradient from the former CCC/USDA facility and near the western boundary of the plume, at 39 µg/L. A trace level of carbon tetrachloride was again found at well MW8S.

The combined analytical results for June 2004, September 2005, and March 2006 indicate that carbon tetrachloride concentrations at some locations are decreasing slightly (while they are increasing slightly or fluctuating at other locations). The contaminant appears to be migrating toward Terrapin Creek. However, like the other data collected at Morrill since 1995, the recent results fail to define a clear pattern of changing contaminant levels or migration. Future monitoring events in September 2006, March 2007, and September 2007 will continue the effort to observe trends.

4.2.2 Chloroform Concentrations and Distribution

In the September 2005 sampling, chloroform was detected at 6 of the 12 monitoring locations (Table 3.1), at concentrations ranging from < 1 µg/L (3 locations) to a maximum 3.2 µg/L at well MW3S. This concentration is below the RSK value of 100 µg/L for chloroform.

In March 2006 (Figure 3.3), chloroform was detected at 6 of 15 monitoring locations, at concentrations ranging from < 1 µg/L (4 locations) to a maximum of 2.6 µg/L at well MW3S.

The presence of chloroform at MW3S and downgradient monitoring points in both sampling events suggests that carbon tetrachloride is being degraded.

4.2.3 Nitrate Concentrations and Distribution

Nitrate was detected in March 2006 at all of the 11 locations sampled for this substance (Figure 3.4), at concentrations ranging from < 1 mg/L (MW6S, MW9S, MW10S) to a maximum concentration of 25.4 mg/L at MW2S. The nitrate concentration exceeded the RSK value of 10 mg/L at 7 of the 11 locations sampled. These values are consistent with results of the September monitoring (Table 3.1). The nitrate levels in groundwater are not associated with activities of the CCC/USDA.

4.3 Preliminary Screening for Anaerobic Biodegradation Processes

Results for the analytical parameters identified in Section 2.2 were used in a preliminary screening of the site to aid in determining whether the *in situ* conditions there are appropriate for anaerobic biodegradation. Long-term monitoring data would be required for a definitive determination of the importance of biodegradation at Morrill, but examination of the results of the present sampling for evidence of *in situ* conditions amenable to biodegradation is valuable nevertheless.

The methodology used in this preliminary evaluation of biodegradation for the Morrill site was presented by the EPA (1998a). This protocol examines the results of the groundwater parameter analyses to establish evidence that anaerobic biodegradation is taking place via reductive dechlorination — only one of the processes by which carbon tetrachloride is biodegraded. Degradation of carbon tetrachloride is also known to take place via a reductive denitrification co-metabolic pathway, as discussed by ITRC (2002). However, the present initial examination evaluates the evidence for reductive dechlorination on the basis of the EPA (1998a) protocol. This commonly used protocol is based on the premise that biodegradation causes predictable changes in groundwater chemistry.

Table 4.1 summarizes the evaluation of the March 2006 analytical results for samples from wells MW1S–MW11S with the EPA protocol.

In monitoring to date, “inadequate evidence” has been found for anaerobic biodegradation of carbon tetrachloride (scores of 0–5 in the scale used in Table 4.1). Though the data density and distribution could affect the screening results to an extent, the available

evidence does not suggest that better coverage would reveal a significant potential for anaerobic biodegradation of carbon tetrachloride at the Morrill site.

TABLE 4.1 Scoring of biodegradation processes at Morrill — March 2006 data.^a

| | Units | MW1S | | MW1D | | MW2S | | MW3S | | MW4S | | MW5S | | MW6S | | MW7S | | MW8S | | MW9S | | MW10S | | MW11S | |
|---|-------|------------------|--------|--------------------|--------|------------------|--------|------------------|--------|------------------|--------|--------------------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
| | | Conc. | Points | Conc. | Points | Conc. | Points | Conc. | Points | Conc. | Points | Conc. | Points | Conc. | Points | Conc. | Points | Conc. | Points | Conc. | Points | Conc. | Points | Conc. | Points |
| Dissolved Oxygen | mg/L | 9.94 | -3 | 5.11 | -3 | 9.4 | -3 | 6.74 | -3 | 10.9 | -3 | 4.52 | 0 | 1.37 | 0 | 5.52 | -3 | 0.9 | 3 | 0.41 | 3 | 2.1 | 0 | 9.4 | -3 |
| Nitrate | mg/L | 15.2 | 0 | < 0.2 ^b | 2 | 25.2 | 0 | 15.2 | 0 | 16.2 | 0 | 22 | 0 | 0.321 | 2 | 19.8 | 0 | 8.97 | 0 | 0.349 | 2 | 0.357 | 2 | 21.8 | 0 |
| Iron(II) | mg/L | 0.01 | 0 | 0 | 0 | 0.14 | 0 | 0.08 | 0 | 0 | 0 | 0.06 | 0 | 0.38 | 0 | 0.03 | 0 | 0.05 | 0 | 0 | 0 | 0.01 | 0 | 0.06 | 0 |
| Sulfate | mg/L | 39.3 | 0 | 1340 ^b | 0 | 51 | 0 | 22.8 | 0 | 18.2 | 2 | 48.5 | 0 | 1560 | 0 | 25.8 | 0 | 159 | 0 | 57.1 | 0 | 42 | 0 | 25.2 | 0 |
| Sulfide | mg/L | < 0.02 | 0 | NA ^c | - | < 0.02 | 0 | < 0.02 | 0 | < 0.02 | 0 | < 0.02 | 0 | < 0.02 | 0 | < 0.02 | 0 | < 0.02 | 0 | < 0.02 | 0 | < 0.02 | 0 | < 0.02 | 0 |
| Methane | mg/L | < 0.002 | 0 | NA | - | < 0.002 | 0 | < 0.002 | 0 | < 0.002 | 0 | < 0.002 | 0 | < 0.002 | 0 | < 0.002 | 0 | < 0.002 | 0 | < 0.002 | 0 | < 0.002 | 0 | < 0.002 | 0 |
| ORP | mV | 220 | 0 | 230 | - | 262 | 0 | 269 | 0 | 154 | 0 | 234 | 0 | 89 | 0 | 268 | 0 | 153 | 0 | 25 | 0 | 88 | 0 | 237 | 0 |
| pH | — | 7.23 | 0 | 6.95 | 0 | 7.07 | 0 | 7.16 | 0 | 7.25 | 0 | 7.25 | 0 | 6.91 | 0 | 7.32 | 0 | 7.04 | 0 | 7.17 | 0 | 7.11 | 0 | 7.33 | 0 |
| Total Organic Carbon | mg/L | 1.68 | 0 | NA | - | 7.63 | 0 | 1.95 | 0 | 9.28 | 0 | 2.38 | 0 | < 1 | 0 | 2 | 0 | 1.12 | 0 | 1.6 | 0 | 4.26 | 0 | 2.19 | 0 |
| Temperature | °C | 15.5 | 0 | 12.9 | 0 | 13 | 0 | 8.9 | 0 | 6.7 | 0 | 13.9 | 0 | 9.8 | 0 | 15.2 | 0 | 12.5 | 0 | 14.6 | 0 | 6.3 | 0 | 14.8 | 0 |
| Carbon Dioxide ^d | mg/L | 40 | 0 | NA | - | 25 | 0 | 25 | 0 | 25 | 0 | 35 | 0 | 60 | 1 | 25 | 0 | 30 | 0 | 35 | 0 | 40 | 0 | 30 | 0 |
| Alkalinity ^d | mg/L | 311 | 0 | NA | - | 301 | 0 | 287 | 0 | 222 | 0 | 297 | 0 | 263 | 0 | 304 | 0 | 302 | 0 | 350 | 0 | 351 | 0 | 316 | 0 |
| Chloride ^d | mg/L | 87 | 2 | 18.5 ^b | 2 | 23.3 | 2 | 3.85 | 0 | 9.11 | 0 | 13.1 | 0 | 31.4 | 2 | 9.76 | 0 | 26.8 | 2 | 5.97 | 0 | 6.07 | 0 | 8.22 | 0 |
| Dissolved Hydrogen | nM | 2.7 ^e | 3 | NA | - | 2.4 ^e | 3 | 2.8 ^e | 3 | 8.5 ^e | 3 | 31 ^e | 3 | NA | 0 | 0 | 3 | NA | 0 | NA | 0 | 0 | 0 | NA | 0 |
| Chloroform | µg/L | 1.8 | 2 | < 1 | 0 | < 1 | 0 | 2.6 | 2 | < 1 | 0 | 0.2 J ^f | 2 | < 1 | 0 | 0.4 J | 2 | < 1 | 0 | < 1 | 0 | < 1 | 0 | 0.9 J | 2 |
| Dichloromethane (methylene chloride) | µg/L | < 1 | 0 | < 1 | 0 | < 1 | 0 | < 1 | 0 | < 1 | 0 | < 1 | 0 | < 1 | 0 | < 1 | 0 | < 1 | 0 | < 1 | 0 | < 1 | 0 | < 1 | 0 |
| Total points => | | | 4 | | 1 | | 2 | | 2 | | 2 | | 5 | | 5 | | 2 | | 5 | | 5 | | 2 | | -1 |

^a Scoring is based on results for samples collected in March 2006. Points are interpreted as follows (EPA 1998a):
0–5 Inadequate evidence for reductive dechlorination.
6–14 Limited evidence for reductive dechlorination.
15–20 Adequate evidence for reductive dechlorination.
> 20 Strong evidence for reductive dechlorination.

^b The inorganic data for MW1D are for a sample collected on June 2, 2004. This well was not sampled for indicated parameters in March 2006.

^c NA, not analyzed.

^d For evaluation of alkalinity, carbon dioxide, and chloride, MW4S (because of its location) was selected to represent background levels. For these constituents, points are awarded when the concentration is greater than twice the background concentration.

^e The dissolved hydrogen data are from sampling in September 2005.

^f Qualifier J indicates an estimated concentration below the method quantitation limit of 1.0 µg/L.

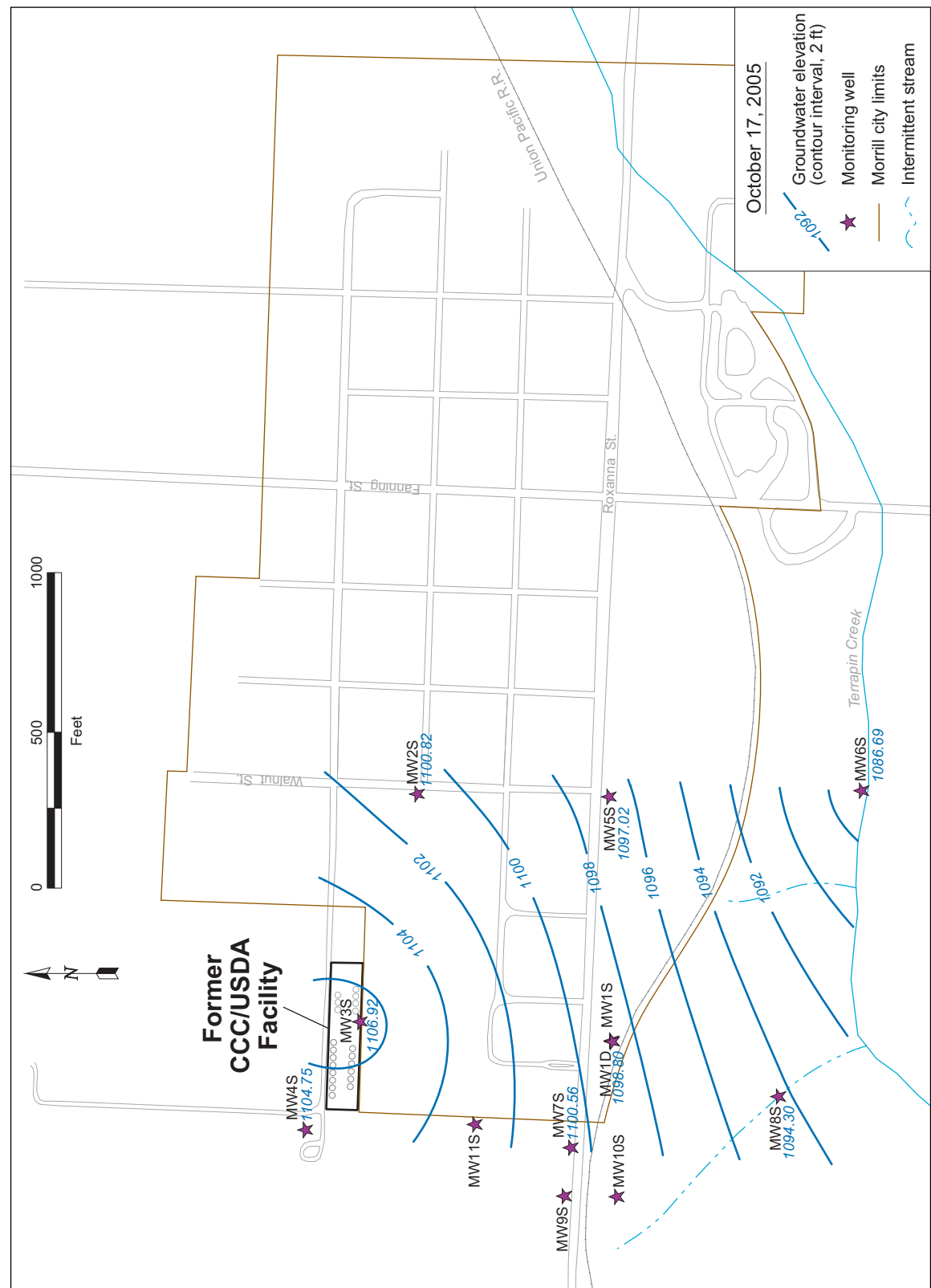


FIGURE 4.1 Potentiometric surface at Morrill, based on water levels measured manually on October 17, 2005.

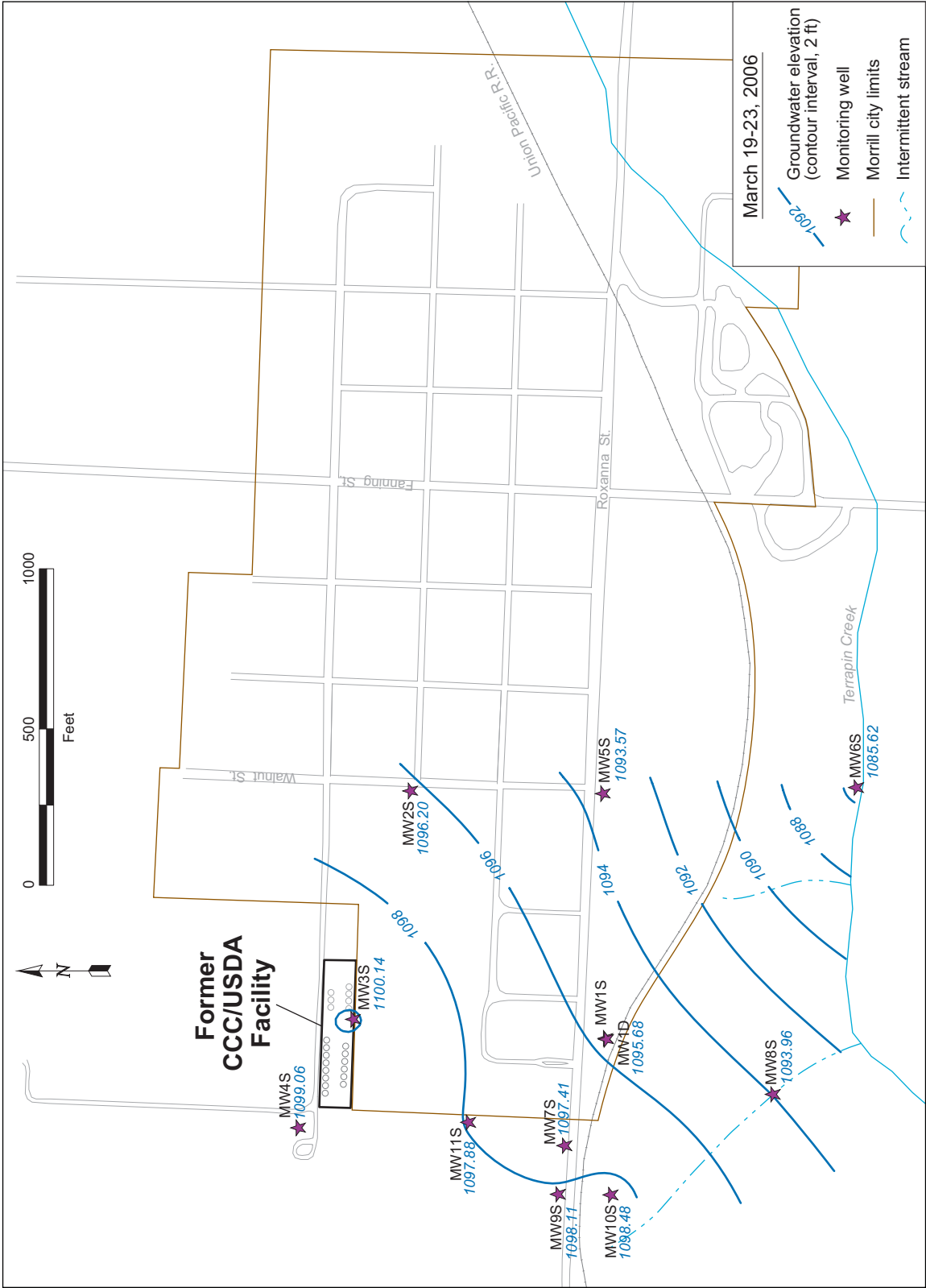


FIGURE 4.2 Potentiometric surface at Morrill, based on water levels measured manually on March 19–23, 2006.

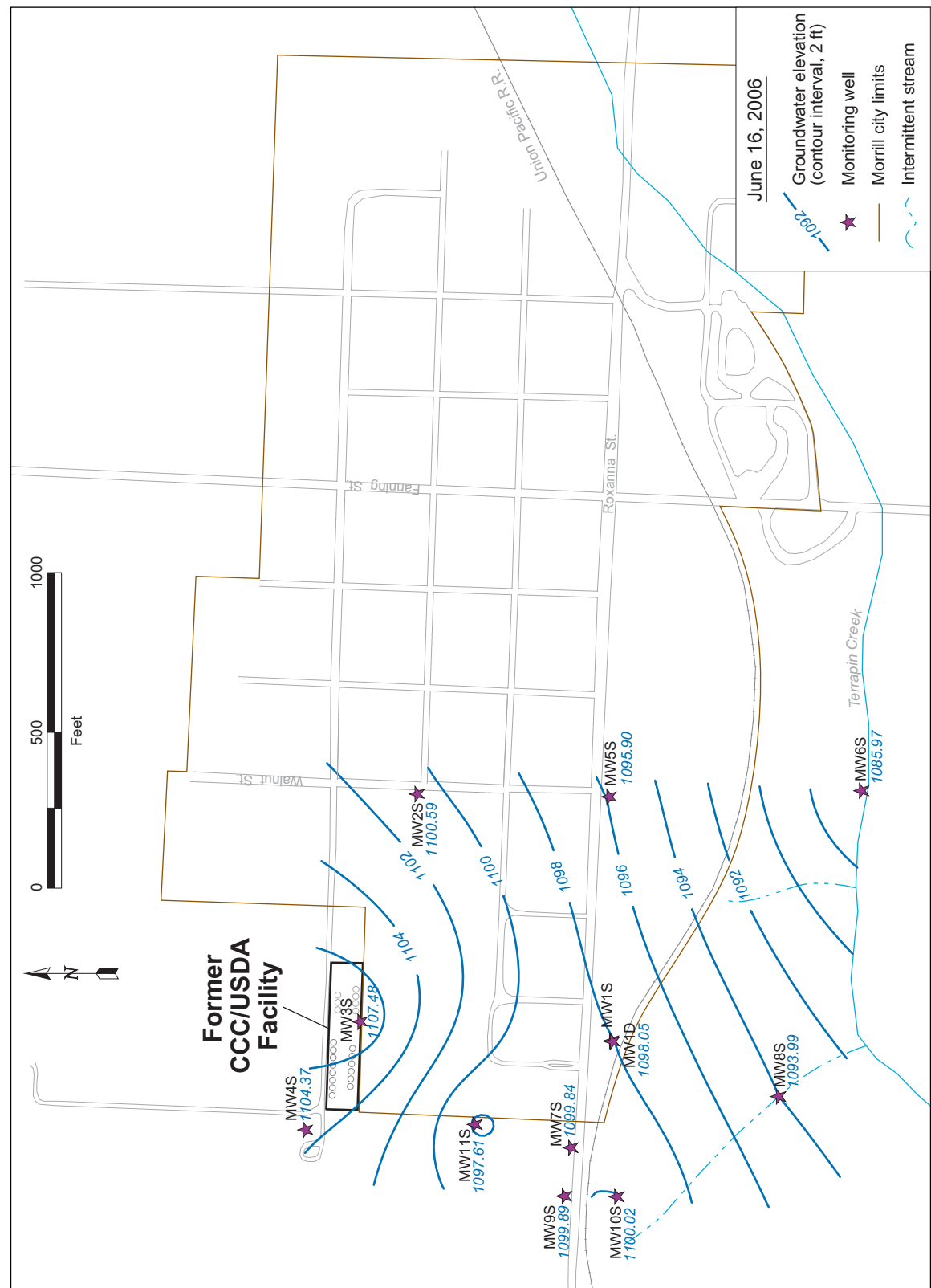


FIGURE 4.3 Potentiometric surface at Morrill, based on water levels measured manually on June 16, 2006.

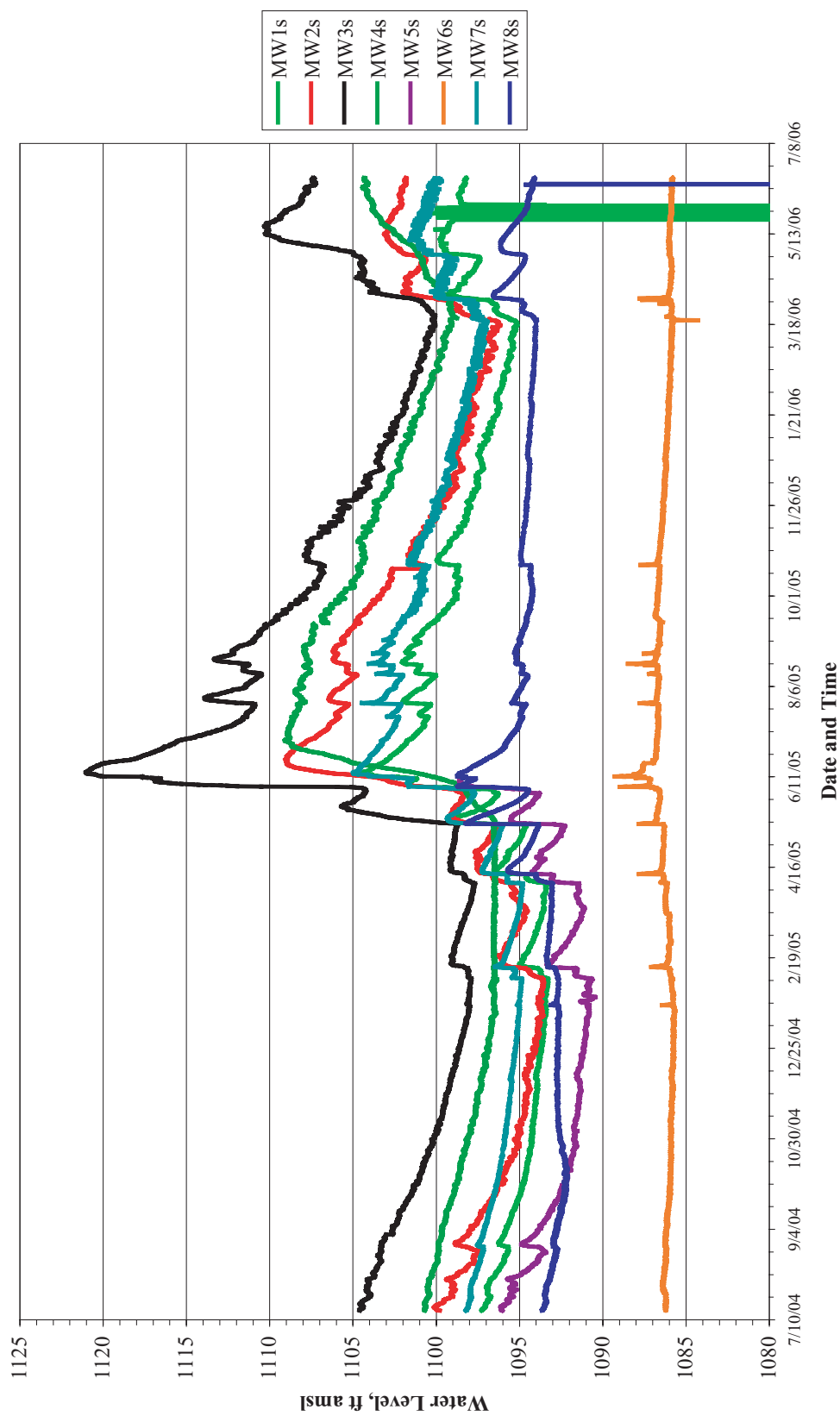


FIGURE 4.4 Hydrographs summarizing results of long-term water level monitoring in wells MW1S–MW8S at Morrill from July 15, 2004, to June 16, 2006.

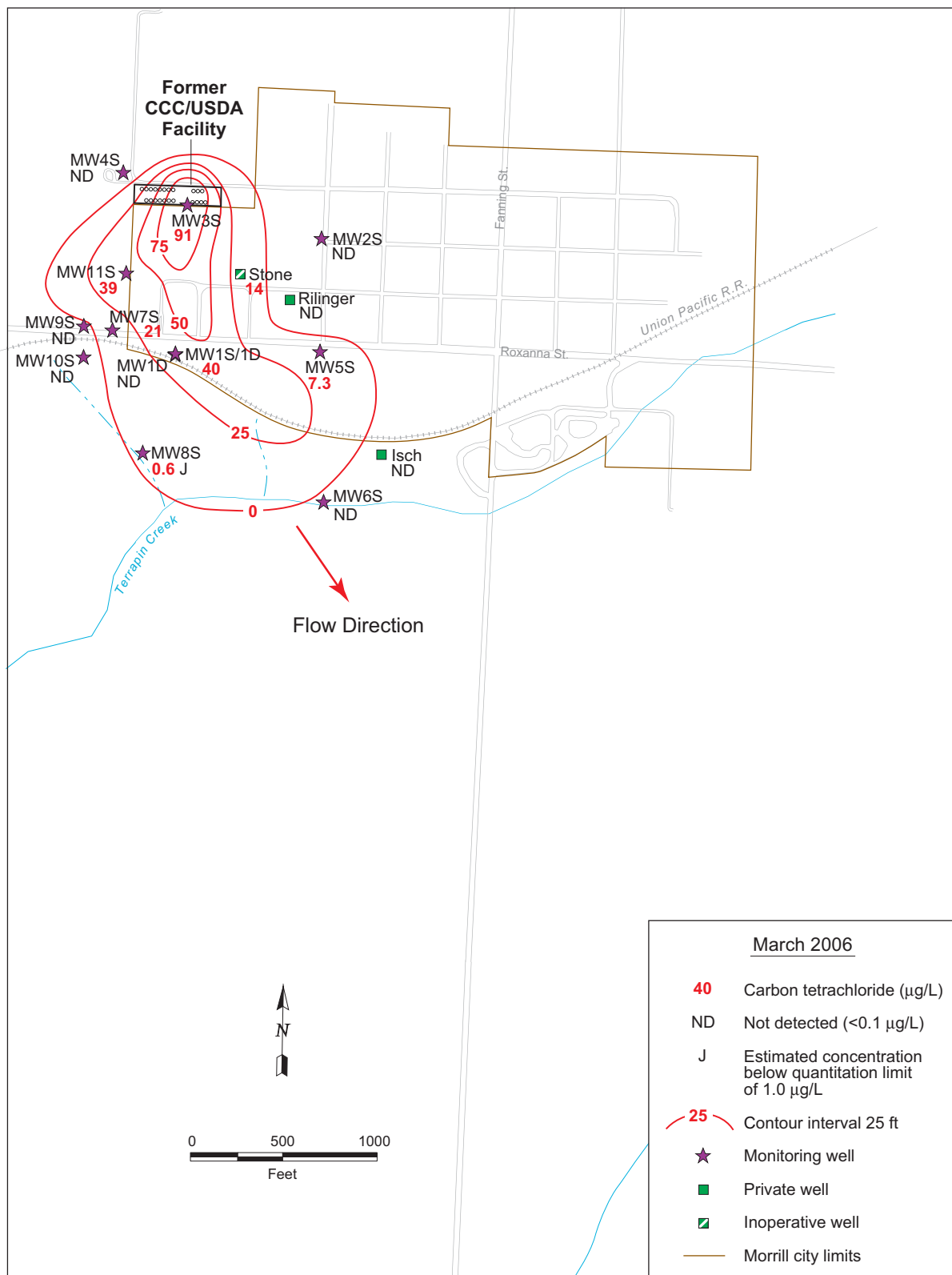


FIGURE 4.5 Lateral extent of the carbon tetrachloride contamination in groundwater at Morrill, as interpreted on the basis of sampling and analyses in March 2006 and flow direction on March 19–23, 2006.

5 Conclusion and Recommendations

5.1 Conclusions

The findings of the September 2005 and March 2006 monitoring events at Morrill support the following conclusions:

- The September 2005 results indicated that additional monitoring wells were needed to track migration along the western border of the plume.
- The March 2006 results, gathered after expansion of the monitoring network in January 2006, show minor decreases or increases in contaminant levels at various locations that do not fall into a clear pattern. However, the results do indicate continued migration of the carbon tetrachloride plume toward Terrapin Creek. Trace levels of carbon tetrachloride ($< 1 \mu\text{g/L}$) in MW8S indicate that the leading edge of the plume is approaching the intermittent stream leading to Terrapin Creek.
- Hand-measured groundwater levels on four occasions in 2005 and 2006 were consistent with each other and with results from two measurements in 2004, indicating a groundwater flow direction to the south-southeast from the former CCC/USDA facility.
- Long-term measurements of groundwater levels in wells MW1S–MW8S, from July 15, 2004, to June 16, 2006, indicate that water levels in two relatively upgradient wells near the former CCC/USDA facility (MW3S and MW2S) responded distinctly to apparent rainfall/recharge events. In contrast, levels in two downgradient wells south of the former facility (MW6S and MW8S) showed virtually no response, probably because of the damping influence of the nearby surface drainages and shallow groundwater at these locations.

- Preliminary screening of groundwater parameters provided inadequate evidence that reductive dechlorination of carbon tetrachloride is taking place at selected locations on the former CCC/USDA property.
- The September 2005 and March 2006 monitoring events were the first and second in the planned series of twice yearly events, to run for at least two years (Argonne 2005a). Subsequent monitoring events are planned for September 2006, March 2007, and September 2007.

5.2 Recommendations

The following recommendations are based on the results reported here and previous work at Morrill:

- The monitoring program should continue as approved by the KDHE (Argonne 2005a).
- Surface water samples should be collected during future monitoring events.

6 References

Argonne, 2002, *Final Master Work Plan: Environmental Investigations at Former CCC/USDA Facilities in Kansas, 2002 Revision*, ANL/ER/TR-02/004, prepared for the Commodity Credit Corporation, U.S. Department of Agriculture, Washington, D.C., by Argonne National Laboratory, Argonne, Illinois, June.

Argonne, 2003, *Final Work Plan: Phase I Expedited Site Characterization, Morrill, Kansas*, ANL/ER/TR-03/001, prepared for the Commodity Credit Corporation, U.S. Department of Agriculture, Washington, D.C., by Argonne National Laboratory, Argonne, Illinois, September.

Argonne, 2004a, *Final Phase I–Phase II Interim Report: Expedited Site Characterization, Morrill, Kansas*, ANL/ER/TR-04/001, prepared for the Commodity Credit Corporation, U.S. Department of Agriculture, Washington, D.C., by Argonne National Laboratory, Argonne, Illinois, December.

Argonne, 2004b, *Draft Supplemental Work Plan for Monitoring Well Installation at Morrill, Kansas*, ANL/ER/AGEM/CHRON-667, prepared for the Commodity Credit Corporation, U.S. Department of Agriculture, Washington, D.C., by Argonne National Laboratory, Argonne, Illinois, February 11.

Argonne, 2004c, *Addendum to Draft Supplemental Work Plan for Monitoring Well Installation at Morrill, Kansas*, ANL/ER/AGEM/CHRON-693, prepared for the Commodity Credit Corporation, U.S. Department of Agriculture, Washington, D.C., by Argonne National Laboratory, Argonne, Illinois, April 2.

Argonne, 2005a, *Final Work Plan: Groundwater Monitoring at Morrill, Kansas*, ANL/ER/TR-05/003, prepared for the Commodity Credit Corporation, U.S. Department of Agriculture, Washington, D.C., by Argonne National Laboratory, Argonne, Illinois, August.

Argonne 2005b, *Final Report: Monitoring Well Installation and Sampling, 2004, at Morrill, Kansas*, ANL/ER/TR-04/010, prepared for the Commodity Credit Corporation, U.S. Department of Agriculture, Washington, D.C., by Argonne National Laboratory, Argonne, Illinois, November.

Argonne, 2005c, *Results of September 2005 Sampling at Morrill, Kansas*, ANL/EVS/AGEM/CHRON-907, prepared for the Commodity Credit Corporation, U.S. Department of Agriculture, Washington, D.C., by Argonne National Laboratory, Argonne, Illinois, November 18.

Argonne, 2005d, *Revised Recommendation for Expansion of the Monitoring Network at Morrill, Kansas*, ANL/EVS/AGEM/CHRON-912, prepared for the Commodity Credit Corporation, U.S. Department of Agriculture, Washington, D.C., by Argonne National Laboratory, Argonne, Illinois, December 5.

Argonne, 2006a, *Methods for Well Installation and Construction at Morrill, Kansas, in March 2006*, ANL/EVS/AGEM/CHRON-923, prepared for the Commodity Credit Corporation, U.S. Department of Agriculture, Washington, D.C., by Argonne National Laboratory, Argonne, Illinois, January 13.

Argonne, 2006b, *Scheduled Groundwater Monitoring at Morrill, Kansas, in March 2006*, ANL/EVS/AGEM/CHRON-940, prepared for the Commodity Credit Corporation, U.S. Department of Agriculture, Washington, D.C., by Argonne National Laboratory, Argonne, Illinois, January 13.

EPA 1994. *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*, EPA 540/R-94/012, Office of Emergency and Remedial Response, U.S. Environmental Protection Agency, Washington, D.C., February.

EPA, 1995, *Method 524.2: Measurement of Purgeable Organic Compounds in Water by Capillary Column gas Chromatography/Mass Spectrometry, Revision 4.1*, edited by J.W. Munch, National Exposure Research Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Cincinnati, Ohio.

EPA, 1998a, *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water*, EPA/600/R-98/128, Office of Research and Development, U.S. Environmental Protection Agency, Washington, D.C., September (<http://www.epa.gov/superfund/resources/gwdocs/protocol.htm>).

EPA, 1998b, *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*, EPA SW846, 3rd edition, Draft Update IVA, U.S. Environmental Protection Agency, January (available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161).

GeoCore, 1994a, *Work Plan: Phase I Sampling and Site Visit: Brown County Groundwater Investigation*, prepared by GeoCore Services, Inc., Salina, Kansas, for the Bureau of Environmental Remediation, Kansas Department of Health and Environment, April 12.

GeoCore, 1994b, *Well Survey Material: Brown County Groundwater Investigation: Morrill PWS Well #5 Site*, field notes recorded by GeoCore Services, Inc., Salina, Kansas, during Phase I sampling of private wells, May 19.

GeoCore, 1994c, *Work Plan: Phase II Drilling and Sampling: Brown County Groundwater Investigation*, prepared by GeoCore Services, Inc., Salina, Kansas, for the Bureau of Environmental Remediation, Kansas Department of Health and Environment, July 14.

GeoCore, 1994d, *Preliminary Report: Phase I Sampling: Brown County Groundwater Investigation*, prepared by GeoCore Services, Inc., Salina, Kansas, for the Bureau of Environmental Remediation, Kansas Department of Health and Environment, July 19.

GeoCore, 1996, *Environmental Site Investigation Report: Phase II Drilling & Sampling: Morrill Public Water Supply Well #5, Morrill, Kansas*, prepared by GeoCore Services, Inc., Salina, Kansas, for the Bureau of Environmental Remediation, Kansas Department of Health and Environment (draft issued August 31, 1995; revised February 29, 1996).

ITRC, 2002, *A Systematic Approach to In Situ Bioremediation in Groundwater Including Decision Trees on In Situ Bioremediation for Nitrates, Carbon Tetrachloride, and Perchlorate*, In Situ Bioremediation Team, Interstate Technology Regulatory Council, Washington, D.C., August (<http://www.itrcweb.org/Documents/ISB-8.pdf>).

Kampbell, D.H., and S.A. Vandegrift, 1998, "Analysis of Dissolved Methane, Ethane, and Ethylene in Ground Water by a Standard Chromatographic Technique," *Journal of Chromatographic Science* 36:253–256.

KDHE, 1989, *Preliminary Assessment of the Morrill Public Water Supply Well #5, Morrill, Kansas (Site Identification Number: KS D981710288)*, completed by R. Bean and J. Alldritt, Bureau of Environmental Remediation, Kansas Department of Health and Environment, June 6.

KDHE, 2000, *Morrill Long Term Monitoring 2000 Results*, memorandum from T. Peterson to F. Arnwine, Bureau of Environmental Remediation, Kansas Department of Health and Environment, October 31.

USDA, 1999, aerial photograph of Morrill, Kansas, NAPP-11460-31 A, U.S. Department of Agriculture, Washington, D.C., March 30.

Appendix A:

Well Construction Diagrams and Registration Forms

Monitor Well MW-09S

Morrill, KS

SW, SW, SE of Section 26, Township 1 South, Range 15 East

Brown County, Kansas

Date: 01/24/06

WELL HEAD PROTECTION

12" Morrison Brothers, Co. Model 418XA Flush mount cover. Top of casing fitted with a (J-Plug) Morrison Brothers, Co. Model 678XA and a screened vent with a locking pipe plug and pad lock.

CONCRETE PAD

Is a minimum of 8" thick and is extend at least 8" larger than the Flush Mount (28" minimum). Sloped to prevent pooling of water, vegetation around well and allowing for placement of a survey pin.

IMPERVIOUS GROUT

The well is grouted with High Solids Bentonite grout, tremied as required, mixed with clean fresh water and having a minimum density of 9.4 lbs. per gallon.

WELL CASING

Well casing is terminate as high as possible inside the Flush Mount and be capped with a (J-Plug) Morrison Brothers, Co. Model 678XA locking plug and pad lock.

HOLE SIZE

The hole is 8 1/4" in diameter from the surface to T.D. and grouted from the top of the sand pack to the base of the Flush Mount.

GRAVEL / SAND PACK

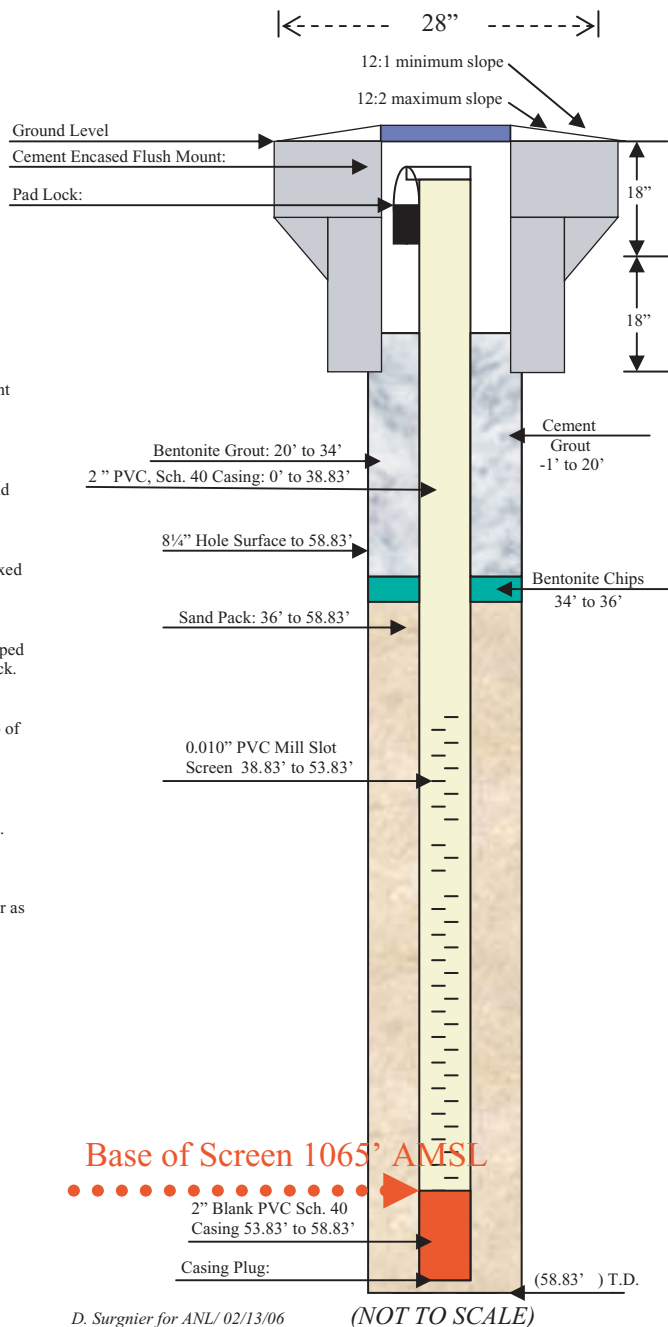
Gravel / Sand Pack is of 10/20 sand and is designed to stabilize the aquifer material and permit the fine fraction to move into the well during development. Gravel pack extends the length at least 2' above the screen.

CONTRACTOR LICENSING

All wells are constructed under the direction of a licensed water well contractor as specified under, Kansas Department of Health and Environment Regulation.

REGISTRATION

All wells will be registered with the Kansas Department of Health and Environment on form WWC-5 provided by that Department.



D. Surgnier for ANL/ 02/13/06

[illegible]

Monitor Well Installation (MW-10S)

Morrill, KS

NW, NW, NE of Section 35, Township 1 South, Range 15 East
Brown County, Kansas
01/25/06

WELL HEAD PROTECTION

12" Morrison Brothers, Co. Model 418XA Flush mount cover. Top of casing fitted with a (J-Plug) Morrison Brothers, Co. Model 678XA and a screened vent with a locking pipe plug and pad lock.

CONCRETE PAD

Is a minimum of 8" thick and extends at least 8" larger than the Flush Mount (28" minimum). Sloped to prevent pooling of water, vegetation around well and allows for placement of a surveyor pin.

IMPERVIOUS GROUT

The well is grouted with High Solids Bentonite and cement grout, tremied as required, mixed with clean fresh water and having a minimum density of 9.4 lbs/15.5. per gallon.

WELL CASING

Well casing is terminate as high as possible inside the Flush Mount and is capped with a (J-Plug) Morrison Brothers, Co. Model 678XA locking plug and pad lock.

HOLE SIZE

The hole is 8 1/4" in diameter from the surface to T.D. and grouted from the top of the sand pack to the base of the Flush Mount.

GRAVEL / SAND PACK

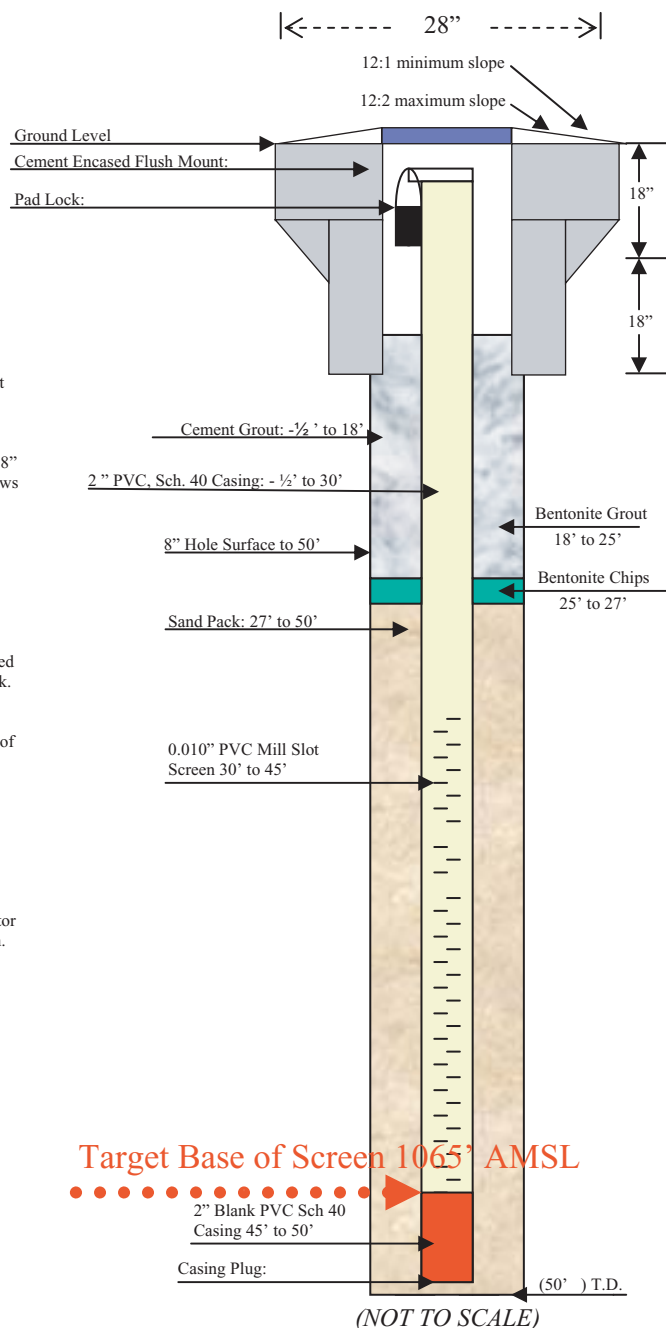
Gravel / Sand Pack is of 10/20 sand and is designed to stabilize the aquifer material and permit the fine fraction to move into the well during development. Gravel pack extends the length of the screen and at least 2' above the screen.

CONTRACTOR LICENSING

Well is constructed under the direction of a Kansas licensed water well contractor as specified under, Kansas Department of Health and Environment Regulation.

REGISTRATION

The well was constructed by a licensed Kansas Driller and registered with the Kansas Department of Health and Environment on form WWC-5.



D. Surgnier for ANL/ 01/25/06

[illegible]

Monitor Well MW-11S

Morrill, KS

SW, SW, SE of Section 26, Township 1 South, Range 15 East

Brown County, Kansas

Date: 01/25/06

WELL HEAD PROTECTION

12" Morrison Brothers, Co. Model 418XA Flush mount cover. Top of casing fitted with a (J-Plug) Morrison Brothers, Co. Model 678XA and a screened vent with a locking pipe plug and pad lock.

CONCRETE PAD

Is a minimum of 8" thick and is extend at least 8" larger than the Flush Mount (28" minimum). Sloped to prevent pooling of water, vegetation around well and allowing for placement of a survey pin.

IMPERVIOUS GROUT

The well is grouted with High Solids Bentonite grout, tremied as required, mixed with clean fresh water and having a minimum density of 9.4 lbs. per gallon.

WELL CASING

Well casing is terminate as high as possible inside the Flush Mount and be capped with a (J-Plug) Morrison Brothers, Co. Model 678XA locking plug and pad lock. 2" PVC Sch 40, threaded casing and Mill Slot (0.010") well screen.

HOLE SIZE

The hole is 8 1/4" in diameter from the surface to T.D. and grouted from the top of the sand pack to the base of the Flush Mount.

GRAVEL / SAND PACK

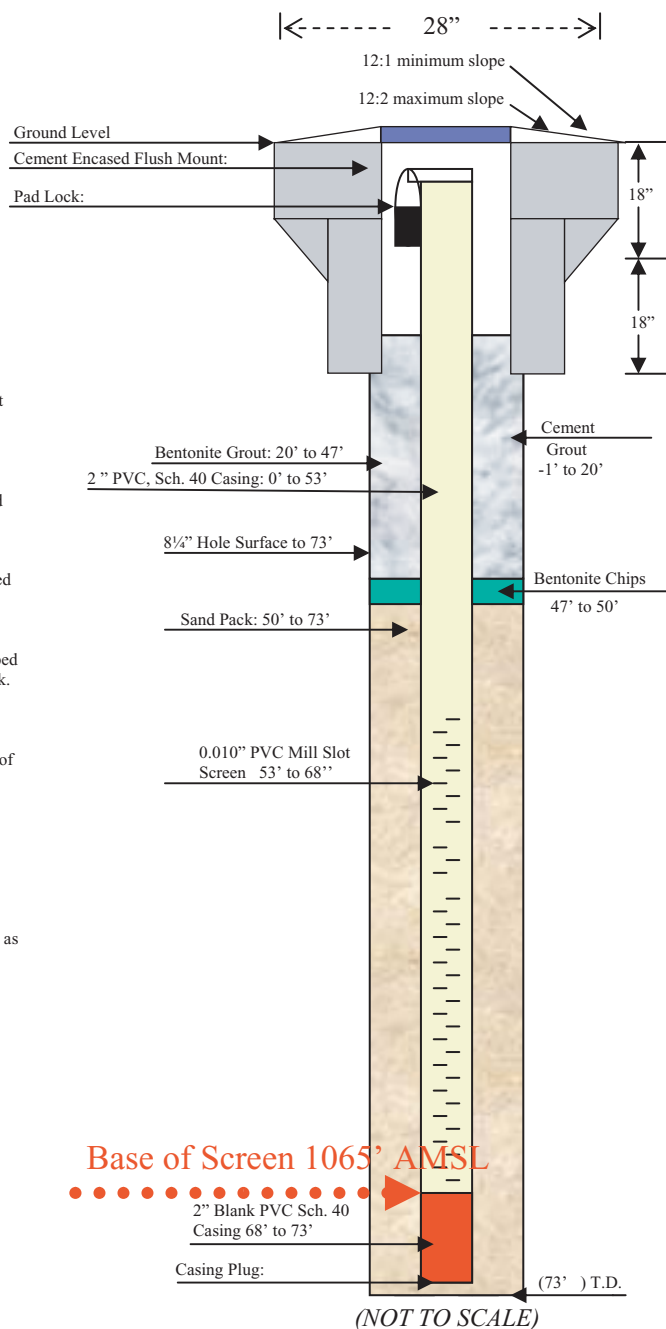
Gravel / Sand Pack is of 10/20 sand and is designed to stabilize the aquifer material and permit the fine fraction to move into the well during development. Gravel pack extends the length and at least 2' above the screen.

CONTRACTOR LICENSING

All wells are constructed under the direction of a licensed water well contractor as specified under, Kansas Department of Health and Environment Regulation.

REGISTRATION

All wells will be registered with the Kansas Department of Health and Environment on form WWC-5 provided by that Department.



D. Surgnier for ANL/ 02/13/06

| WATER WELL RECORD Form WWC-5 KSA 82a-1212 ID No. | | | |
|--|-----|--|----------------------------|
| 1 LOCATION OF WATER WELL: | | Fraction | Section Number |
| County: <u>Brown</u> | | <u>SW 1/4 SW 1/4 SE 1/4</u> | <u>26</u> |
| Township Number | | Range Number | |
| T <u>1</u> S | | R <u>15</u> W | |
| Distance and direction from nearest town or city street address of well if located within city? | | | |
| <u>Morrill, KS. Near west edge of city limits</u> | | | |
| 2 WATER WELL OWNER: <u>USDA FCCC</u> | | | |
| RR#, St. Address, Box # | | Board of Agriculture, Division of Water Resources | |
| <u>Stop 0513 - Room 4725</u> | | Application Number: | |
| City, State, ZIP Code | | <u>1400 Independence Ave SW</u> | |
| <u>Washington, DC 20250</u> | | | |
| 3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX: | | 4 DEPTH OF COMPLETED WELL <u>73'</u> ft. ELEVATION: | |
| | | Depth(s) Groundwater Encountered 1 ft. 2 ft. 3 ft. | |
| | | WELL'S STATIC WATER LEVEL ft. below land surface measured on mo/day/yr | |
| | | Pump test data: Well water was ft. after hours pumping gpm | |
| | | Est. Yield gpm: Well water was ft. after hours pumping gpm | |
| WELL WATER TO BE USED AS: | | 5 Public water supply 8 Air conditioning 11 Injection well 12 Other (Specify below) | |
| 1 Domestic 3 Feedlot 6 Oil field water supply 9 Dewatering | | 2 Irrigation 4 Industrial 7 Domestic (lawn & garden) 10 Monitoring well | |
| Was a chemical/bacteriological sample submitted to Department? Yes No ; If yes, mo/day/yr sample was submitted | | | |
| Water Well Disinfected? Yes No | | | |
| 5 TYPE OF BLANK CASING USED: | | | |
| 1 Steel 3 RMP (SR) 7 Fiberglass 8 Concrete tile 9 Other (specify below) | | 2 PVC 4 ABS 6 Asbestos-Cement 10 Asbestos-Cement 11 Other (Specify) | |
| Blank casing diameter <u>2</u> in. to <u>53</u> ft. Dia <u>2</u> in. to <u>73</u> ft. Dia | | Casing joints: Glued Clamped Welded Threaded <u>Flush Thread</u> | |
| Casing height above land surface <u>0</u> in. weight lbs./ft. Wall thickness or gauge No. <u>sch 40</u> | | | |
| TYPE OF SCREEN OR PERFORATION MATERIAL: | | | |
| 1 Steel 3 Stainless Steel 5 Fiberglass 8 RMP (SR) 10 Asbestos-Cement 11 Other (Specify) | | 2 Brass 4 Galvanized Steel 6 Concrete tile 9 ABS 12 None used (open hole) | |
| SCREEN OR PERFORATION OPENINGS ARE: | | | |
| 1 Continuous slot 2 Louvered shutter 3 Mill slot 4 Key punched | | 5 Gauzed wrapped 6 Wire wrapped 7 Torch cut 8 Saw cut 9 Drilled holes 10 Other (specify) ft. | |
| SCREEN-PERFORATED INTERVALS: From <u>53</u> ft. to <u>68</u> ft. From ft. to ft. | | | |
| GRAVEL PACK INTERVALS: From <u>50</u> ft. to <u>73</u> ft. From ft. to ft. | | | |
| 6 GROUT MATERIAL: 1 Neat cement 2 Cement grout 3 Bentonite 4 Other | | | |
| Grout intervals: From <u>50</u> ft. to <u>47</u> ft. From <u>47</u> ft. to <u>20</u> ft. From <u>20</u> ft. to <u>3</u> Neat cement | | | |
| What is the nearest source of possible contamination: | | | |
| 1 Septic tank 2 Sewer lines 3 Watertight sewer lines 4 Lateral lines 5 Cess pool 6 Seepage pit | | 7 Pit privy 8 Sewage lagoon 9 Feedyard 10 Livestock pens 11 Fuel storage 12 Fertilizer storage 13 Insecticide storage 14 Abandoned water well 15 Oil well/Gas well 16 Other (specify below) | |
| Direction from well? | | | |
| FROM | TO | LITHOLOGIC LOG | FROM TO PLUGGING INTERVALS |
| 0 | 20' | Brown Clay | |
| 20' | 30' | Brown Clay some silt | |
| 30' | 55' | light Brown Clay some silt | |
| 55' | 60' | gray Clay some silt | |
| 60' | 74' | Brown silt clay | |
| 7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) <u>1/25/06</u> and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. <u>6258</u> This Water Well Record was completed on (mo/day/yr) <u>3/14/06</u> under the business name of <u>Boert Longyear Company</u> by (signature) <u>[Signature]</u> | | | |
| INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRINT CLEARLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367 Telephone 785-298-6522. Send one to WATER WELL OWNER and retain one for your records. Fee of \$5.00 for each constructed well. | | | |

Appendix B:

**Chronological Summary of Activities
at Morrill in September 2005–March 2006**

TABLE B.1 Field log sequence of sampling activities in 2005–2006 at Morrill, Kansas.

| Sample Date | Time | Location | Depth (ft below TOC) | Sample | Medium | Sample Type ^a | COC ^b | Log; Page ^c | Sample Description |
|--------------------------------------|-------|----------|----------------------|-----------------------------|--------|--------------------------|------------------|------------------------|--|
| <i>September 2005 Sampling Event</i> | | | | | | | | | |
| 09/12/05 | 17:50 | MW7S | 20–45 | MRMW7S-W-19258 | Water | MW | 1089 | 2;126 | Depth to water from top of casing (TOC) = 17.57 ft. Depth of well = 46.94 ft below TOC. Sample collected at low flow after purging of 55 gal with a Redi-Flo pump. |
| 09/12/05 | 17:50 | MW7S | 20–45 | MRMW7S-A-19258 | Vapor | MW | 1548B | 2;126 | Well vapor effluent sample for dissolved hydrogen analysis at Microseeps, Inc., in Pittsburgh, Pennsylvania, with Method AM20GAX. |
| 09/13/05 | 9:00 | MW1D | 63–88 | MRMW1D-W-16518 | Water | MW | 1089 | 2;122 | Depth to water from TOC = 23.72 ft. Depth of well = 88.6 ft below TOC. Sample collected at low flow after purging of 200 gal with a Redi-Flo pump. |
| 09/13/05 | 10:00 | MW1S | 11–51 | MRMW1S-W-19259 | Water | MW | 1089 | 2;130 | Depth to water from TOC = 24.16 ft. Depth of well = 53.9 ft below TOC. Sample collected at low flow after purging of 57 gal with a Redi-Flo pump. |
| 09/13/05 | 10:00 | MW1S | 11–51 | MRMW1S-A-19259 | Vapor | MW | 1548B | 2;130 | Well vapor effluent sample for dissolved hydrogen analysis. |
| 09/13/05 | 12:00 | QC | – | MRQCTB-W-16519 ^d | Water | TB | 1089 | 2;139 | Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 1089. |
| 09/13/05 | 12:00 | QC | – | MRQCTB-W-16520 ^d | Water | TB | 1095 | 2;139 | Trip blank sent to Severn-Trent Laboratories (STL) for methane analysis with samples listed on COC 1095. |
| 09/13/05 | 12:20 | MW5S | 15–55 | MRMW5S-W-19260 | Water | MW | 1089 | 2;136 | Depth to water from TOC = 22.66 ft. Depth of well = 54.20 ft below TOC. Sample collected at low flow after purging of 75 gal with a Redi-Flo pump. |
| 09/13/05 | 12:20 | MW5S | 15–55 | MRMW5S-A-19260 | Vapor | MW | 1548B | 2;136 | Well vapor effluent sample for dissolved hydrogen analysis. |

TABLE B.1 (Cont.)

| Sample Date | Time | Location | Depth (ft below TOC) | Sample | Medium | Sample Type ^a | COC ^b | Log; Page ^c | Sample Description |
|--|-------|----------|----------------------|-----------------------------|--------|--------------------------|------------------|------------------------|--|
| <i>September 2005 Sampling Event (cont.)</i> | | | | | | | | | |
| 09/13/05 | 17:00 | MW3S | 18–48 | MRMW3S-W-19261 | Water | MW | 1893 | 2;140 | Depth to water from TOC = 25.60 ft. Depth of well = 47.6 ft below TOC. Sample collected at low flow after purging of 50 gal with a Redi-Flo pump. |
| 09/13/05 | 17:00 | MW3S | 18–48 | MRQCDU-W-16521 ^d | Water | MW | 1893 | 2;140 | Replicate of sample MRMW3S-W-19261, collected without additional purging by using a Redi-Flo pump at low flow. |
| 09/13/05 | 17:00 | MW3S | 18–48 | MRMW3S-A-19261 | Vapor | MW | 1548B | 2;140 | Well vapor effluent sample for dissolved hydrogen analysis. |
| 09/14/05 | 8:45 | QC | – | MRQCTB-W-16522 ^d | Water | TB | 1893 | 2;153 | Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 1893. |
| 09/14/05 | 8:45 | QC | – | MRQCTB-W-16523 ^d | Water | TB | 1094 | 2;153 | Trip blank sent to STL for methane analysis with samples listed on COC 1094. |
| 09/14/05 | 8:55 | MW6S | 10–25 | MRMW6S-W-19263 | Water | MW | 1893 | 2;150 | Depth to water from TOC = 4.7 ft. Depth of well = 26.9 ft below TOC. Sample collected at low flow after purging of 43 gal with a Redi-Flo pump. |
| 09/14/05 | 11:50 | MW2S | 13–53 | MRMW2S-W-19264 | Water | MW | 1893 | 2;158 | Depth to water from TOC = 33.68 ft. Depth of well = 53.33 ft below TOC. Sample collected at low flow after purging of 38 gal with a Redi-Flo pump. |
| 09/14/05 | 11:50 | MW2S | 13–53 | MRMW2S-A-19264 | AE | MW | 1548B | 2;158 | Well vapor effluent sample for dissolved hydrogen analysis. |
| 09/14/05 | 12:00 | QC | – | MRQCRI-W-16524 ^d | Water | RI | 1516 | 2;165 | Rinsate of decontaminated Redi-Flo purge hose after sampling of MW2S. |
| 09/14/05 | 12:30 | MW4S | 17–47 | MRMW4S-W-19262 | Water | MW | 1893 | 2;146 | Depth to water from TOC = 36.21 ft. Depth of well = 47.81 ft below TOC. Sample collected by using a bailer after purging of 8 gal with a Redi-Flo pump at 0.5 gpm. |
| 09/14/05 | 12:30 | MW4S | 17–47 | MRMW4S-A-19262 | Vapor | MW | 1548B | 2;146 | Well vapor effluent sample for dissolved hydrogen analysis. |

TABLE B.1 (Cont.)

| Sample Date | Time | Location | Depth (ft below TOC) | Sample | Medium | Sample Type ^a | COC ^b | Log; Page ^c | Sample Description |
|--|-----------------|-----------|----------------------|-------------------------------|--------|--------------------------|------------------|------------------------|--|
| <i>September 2005 Sampling Event (cont.)</i> | | | | | | | | | |
| 09/14/05 | 16:00 | QC | – | MRQCWADR-W-16510 ^d | Water | BT | 1516 | 2;165 | Composite sample of waste purge water accumulated during September 2005 sampling. |
| 09/14/05 | 17:00 | MW8S | 10–25 | MRMW8S-W-19265 | Water | MW | 1516 | 2;162 | Depth to water from TOC = 4.02 ft. Depth of well = 26.82 ft below TOC. Sample collected by using a bailer after purging of 57 gal with a Redi-Flo pump. |
| 09/14/05 | 17:35 | QC | – | MRQCRI-W-16525 ^d | Water | RI | 1516 | 2;165 | Rinsate of decontaminated bailer after sampling of MW8S. |
| 09/14/05 | 17:40 | QC | – | MRQCTB-W-16526 ^d | Water | TB | 1516 | 2;165 | Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 1516. |
| 09/14/05 | 17:41 | QC | – | MRQCTB-W-16527 ^d | Water | TB | 1515 | 2;165 | Trip blank sent to STL for methane analysis with samples listed on COC 1515. |
| 09/14/05 | 18:30 | Stone | Unk ^e –43 | MRPRSTON-W-16511 | Water | DW | 1516 | 2;166 | Stone private well, 6 in. in diameter. Depth to water from TOC = 17.18 ft. Depth of well = 40 ft below TOC. Sample collected at low flow after purging of 60 gal with a Redi-Flo pump at 2.75 gpm. |
| 09/14/05 | 18:50 | Rillinger | Unk | MRPRILL-W-16512 | Water | DW | 1516 | 2;170 | Rillinger lawn and garden well, 6-in.-diameter casing. Sampled from spigot after purging of approximately 60 gal. Pump prevented measurement of water level and well depth. |
| 09/14/05 | 19:00 | Isch | Unk | MRPRISCH-W-16513 | Water | DW | 1516 | 2;174 | Private well on co-op property between equipment wash area and railroad tracks. Sample of water flowing from a cut in casing, collected by direct filling with no additional purging. |
| 09/14/05 | NR ^f | QC | – | H2-Trip Blank ^d | Vapor | TB | 1548B | COC | Trip blank sent to Microseeps, Inc., for dissolved hydrogen analysis with samples listed on COC 1548B. |

TABLE B.1 (Cont.)

| Sample Date | Time | Location | Depth (ft below TOC) | Sample | Medium | Sample Type ^a | COC ^b | Log; Page ^c | Sample Description |
|---|-------|----------|----------------------|----------------------------|--------|--------------------------|------------------|------------------------|---|
| <i>February 2006 Monitoring Well Sampling after Installation on January 24–26, 2006</i> | | | | | | | | | |
| 02/01/06 | 18:00 | QC | – | MRQCD-W-16548 ^d | Water | FB | 3242 | 3;5 | Blank of water used during installation of monitoring wells MW09S, MW10S, and MW11S. |
| 02/01/06 | NR | QC | – | EVTB3-W-13226 ^d | Water | TB | 3242 | COC | Trip blank sent to the AGEM Laboratory with samples listed on COC 3242. |
| 02/14/06 | 10:49 | MW9S | 38.83–53.83 | MR09S-G-16549 ^d | Water | MW | 4547 | 3;9 | Well located at south fence line. Depth to water = 19.5 ft below TOC. Depth of well = 68.64 ft below TOC. Sample collected by using a bailer prior to development. |
| 02/14/06 | 11:17 | MW11S | 53–68 | MR11S-G-16550 ^d | Water | MW | 4547 | 3;13 | Well located at west fence line. Depth to water = 37.35 ft below TOC. Depth of well = 73.60 ft below TOC. Sample collected by using a bailer prior to development. |
| 02/14/06 | 11:29 | MW11S | 53–68 | MR11S-G-16551 ^d | Water | MW | 4547 | 3;17 | Replicate of sample MR11S-G-16550. |
| 02/14/06 | 11:48 | MW10S | 30–45 | MR10S-G-16552 ^d | Water | MW | 4547 | 3;21 | Depth to water = 11.80 ft below TOC. Depth of well = 49.65 ft below TOC. Sample collected by using a bailer prior to development. |
| 02/14/06 | 14:22 | QC | – | MRCM-G-16553 ^d | Water | BT | 4547 | 3;25 | Sample of combined development water from MW09S, MW10S, and MW11S. |
| 02/14/06 | 15:57 | QC | – | EVFB-W-13239 ^d | Water | TB | 4547 | COC | Trip blank sent to the AGEM Laboratory with samples listed on COC 4547. |
| <i>March 2006 Sampling Event</i> | | | | | | | | | |
| 03/19/06 | 9:50 | MW1D | 63–88 | MRMW1D-W-19986 | Water | MW | 4515 | 2;177 | Existing 4-in. deep well adjacent to city well pump house. Depth to water from TOC = 26.85 ft. Depth of well = 88.60 ft below TOC. Sample collected at low flow after purging of 112 gal with a Redi-Flo pump at 1.6 gpm. |

TABLE B.1 (Cont.)

| Sample Date | Time | Location | Depth (ft below TOC) | Sample | Medium | Sample Type ^a | COC ^b | Log; Page ^c | Sample Description |
|--|-------|-----------|----------------------|-----------------------------|--------|--------------------------|------------------|------------------------|---|
| <i>March 2006 Sampling Event (cont.)</i> | | | | | | | | | |
| 03/19/06 | 12:40 | Stone | Unk–43 | MRSTONE-W-19987 | Water | DW | 4515 | 2;181 | Sample from 6-in.-diameter steel-cased well at James Stone residence. Depth to water from TOC = 17.42 ft. Depth of well = 40 ft below TOC. Sample collected at low flow after purging of 100 gal with a Redi-Flo pump at approximately 1 gpm. |
| 03/19/06 | 13:00 | Rillinger | Unk | MRRILINGER-W-19988 | Water | DW | 4515 | 2;185 | Sample from 6-in.-diameter steel-cased well at Rillinger residence. Sample collected at spigot after approximately 5 min of purging. |
| 03/20/06 | 10:35 | MW6S | 10–25 | MRMW6S-W-19990 | Water | MW | 4515 | 2;189 | Sample from existing 4-in. well south of co-op tank farm, adjacent to creek. Depth to water from TOC = 5.35 ft. Depth of well = 26.91 ft below TOC. Sample collected at low flow after purging of 43 gal with a Redi-Flo pump. |
| 03/20/06 | 12:45 | MW8S | 10–25 | MRMW8S-W-19991 | Water | MW | 4515 | 2;191 | Sample from existing 4-in. well in bean field south of railroad. Depth to water from TOC = 4.57 ft. Depth of well = 26.41 ft below TOC. Sample collected at low flow after purging of 43 gal with a Redi-Flo pump. |
| 03/20/06 | 12:45 | QC | – | MRQCFB-W-19997 ^d | Water | TB | 4515 | 2;199 | Trip blank sent to the AGEM Laboratory with samples listed on COC 4515. |
| 03/20/06 | 12:45 | QC | – | MRQCFB-W-19998 ^d | Water | TB | 4516 | 2;199 | Trip blank sent to STL with samples listed on COC 4516 for attenuation parameter analysis. |
| 03/21/06 | 10:50 | MW2S | 13–53 | MRMW2S-W-19992 | Water | MW | 4210 | 2;201 | Existing 4-in. well NW of intersection of Walnut St. and Elliot St. Depth to water from TOC = 40.87 ft. Depth of well = 53.32 ft below TOC. Sample collected at low flow after purging of 27 gal with a Redi-Flo pump at approximately 1 gpm. |

TABLE B.1 (Cont.)

| Sample Date | Time | Location | Depth (ft below TOC) | Sample | Medium | Sample Type ^a | COC ^b | Log; Page ^c | Sample Description |
|--|-------|----------|----------------------|--------------------------------|--------|--------------------------|------------------|------------------------|---|
| <i>March 2006 Sampling Event (cont.)</i> | | | | | | | | | |
| 03/21/06 | 14:20 | MW4S | 17–47 | MRMW4S-W-19993 | Water | MW | 4210 | 4;5 | Existing 4-in. well NW of former CCC/USDA facility. Depth to water from TOC = 44.55 ft. Depth of well = 47.72 ft below TOC. Sample collected at low flow after purging of 6 gal with a Redi-Flo pump at approximately 1 gpm. |
| 03/21/06 | 16:00 | MW10S | 30–45 | MRMW10S-W-19999 | Water | MW | 4210 | 4;9 | New 2-in. well on the north edge of the haul road south of railroad. Depth to water from TOC = 12.30 ft. Depth of well 49.60 ft below TOC. Sample collected at low flow after purging of 19 gal with a Redi-Flo pump. |
| 03/21/06 | 16:20 | QC | – | MRQCFB-W-20010 ^d | Water | TB | 4211 | 4;14 | Trip blank sent to STL for attenuation parameter analysis with samples listed on COC 4211. |
| 03/21/06 | 16:30 | QC | – | MRQCFB-W-20011 ^d | Water | TB | 4210 | 4;14 | Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 4210. |
| 03/22/06 | 9:10 | MW9S | 38.83–53.83 | MRMW9S-W-20004 | Water | MW | 3771 | 4;17 | New 2-in. well approximately 60 ft west of MW7S. Depth to water from TOC = 20.20 ft. Depth of well = 58.62 ft below TOC. Sample collected at low flow after purging of 20 gal with a Redi-Flo pump at approximately 1 gpm. |
| 03/22/06 | 10:30 | MW7S | 20–45 | MRMW7S-W-20000 | Water | MW | 3771 | 4;21 | Existing 4-in. well in cornfield north of town, near highway. Depth to water from TOC = 22.45 ft. Depth of well = 46.98 ft below TOC. Sample collected at low flow after purging of 48 gal with a Redi-Flo pump at approximately 1 gpm. |
| 03/22/06 | 11:25 | MW11S | 53–68 | MRQCMW11S-W-20006 ^d | Water | MW | 3770 | 4;26 | Aliquots of sample MRMW11S-W-20001 sent to EnviroSystems (ENVSYS) for verification organic analysis, collected without additional purging by using a Redi-Flo pump at low flow. |

TABLE B.1 (Cont.)

| Sample Date | Time | Location | Depth (ft below TOC) | Sample | Medium | Sample Type ^a | COC ^b | Log; Page ^c | Sample Description |
|--|-------|----------|----------------------|-----------------------------|--------|--------------------------|------------------|------------------------|---|
| <i>March 2006 Sampling Event (cont.)</i> | | | | | | | | | |
| 03/22/06 | 11:25 | MW11S | 53–68 | MRQCDU-W-20005 | Water | MW | 3772 | 4:26 | Aliquots of sample MRMW11S-W-20001 sent to STL for inorganic and attenuation parameter analyses, collected without additional purging by using a Redi-Flo pump at low flow. |
| 03/22/06 | 11:25 | MW11S | 53–68 | MRMW11S-W-20001 | Water | MW | 3771 | 4:25 | New 2-in. well approximately 150 ft north of fenced gate along east fence line. Depth to water from TOC = 35.2 ft. Depth of well = 72.5 ft below TOC. Sample collected at low flow after purging of 20 gal with a Redi-Flo pump at approximately 1 gpm. |
| 03/22/06 | 11:25 | MW11S | 53–68 | MRQCDU-W-20002 ^d | Water | MW | 3771 | 4:26 | Replicate of sample MRMW11S-W-20001, collected without additional purging by using a Redi-Flo pump at low flow. |
| 03/22/06 | 11:30 | QC | – | MRQCRI-W-19995 ^d | Water | RI | 3771 | 4:26 | Rinsate of decontaminated sampling tube after collection of samples at MW11S. |
| 03/22/06 | 15:04 | QC | – | MRQCFB-W-20007 ^d | Water | TB | 3770 | 4:26 | Trip blank sent to ENVSY for verification organic analysis with MW11S sample listed on COC 3770. |
| 03/22/06 | 15:10 | MW5S | 15–55 | MRMW5S-W-19996 | Water | MW | 3771 | 4:29 | Existing 4-in. well south of intersection of Walnut St. and Roxanna St. Depth to water from TOC = 28.64 ft. Depth of well = 54.51 ft below TOC. Sample collected at low flow after purging of 50 gal with a Redi-Flo pump at approximately 1.5 gpm. |
| 03/22/06 | 16:30 | MW1S | 11–51 | MRMW1S-W-20008 | Water | MW | 3771 | 4:33 | Existing 4-in. shallow well adjacent to city well pump house. Depth to water from TOC = 29.00 ft. Depth of well = 53.95 ft below TOC. Sample collected at low flow after purging of 48 gal with a Redi-Flo pump at approximately 1 gpm. |
| 03/22/06 | 16:30 | QC | – | MRQCTB-W-20009 ^d | Water | TB | 4212 | 4:35 | Trip blank sent to STL for attenuation parameter analysis with samples listed on COC 4212. |

TABLE B.1 (Cont.)

| Sample Date | Time | Location | Depth (ft below TOC) | Sample | Medium | Sample Type ^a | COC ^b | Log; Page ^c | Sample Description |
|--|-------|----------|----------------------|-----------------------------|--------|--------------------------|------------------|------------------------|--|
| <i>March 2006 Sampling Event (cont.)</i> | | | | | | | | | |
| 03/22/06 | 16:45 | QC | – | MRQCTB-W-20012 ^d | Water | TB | 3772 | 4:35 | Trip blank sent to STL for attenuation parameter analysis with samples listed on COC 3772. |
| 03/22/06 | 16:50 | QC | – | MRQCTB-W-20013 ^d | Water | TB | 3771 | 4:35 | Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 3771. |
| 03/23/06 | 8:35 | MW3S | 18–48 | MRQCDU-W-20016 ^d | Water | MW | 3777 | 4:38 | Aliquots of sample MRMW3S-W-19994 sent to STL for inorganic and attenuation parameter analyses, collected without additional purging by using a Redi-Flo pump at low flow. |
| 03/23/06 | 8:35 | MW3S | 18–48 | MRMW3S-W-19994 | Water | MW | 4285 | 4:37 | Existing 4-in. well south of former CCC/USDA facility. Depth to water from TOC = 35.62 ft. Depth of well = 49.74 ft below TOC. Sample collected at low flow after purging of 28 gal with a Redi-Flo pump at approximately 1 gpm. |
| 03/23/06 | 8:35 | MW3S | 18–48 | MRQCDU-W-20014 ^d | Water | MW | 4285 | 4:38 | Replicate of sample MRMW3S-W-19994, collected without additional purging by using a Redi-Flo pump at low flow. |
| 03/23/06 | 8:50 | QC | – | MRQCRI-W-20019 ^d | Water | RI | 4285 | 4:38 | Rinsate of decontaminated sampling tube after collection of samples at MW3S. |
| 03/23/06 | 9:30 | Isch | Unk | MRISCH-W-19989 | Water | DW | 4285 | 4:41 | Sample from private well on co-op property west of Fanning St., between the equipment wash area and the railroad tracks. Sample collected from spigot after purging of 20 gal. |
| 03/23/06 | 10:15 | QC | – | MRQCDR-W-20020 ^d | Water | BT | 4285 | 4:45 | Composite sample of purge water containerized during the March 2006 sampling event. |
| 03/23/06 | 18:15 | QC | – | EVQCTB-W-20105 ^d | Water | TB | 4286 | COC | Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 4285 (Morrill and Everest samples) and COC 4286 (Everest samples). |
| 03/23/06 | 18:30 | QC | – | MRQCTB-W-20017 ^d | Water | TB | 3777 | 4:47 | Trip blank sent to STL for attenuation parameter analysis with samples listed on COC 3777. |

TABLE B.1 (Cont.)

| | |
|--------------|---|
| ^a | Sample types: BT, waste characterization; DW, domestic well; FB, field blank; MW, monitoring well; RI, rinsate; TB, trip blank. |
| ^b | Chain-of-custody form number. |
| ^c | Location of record in logbook; on file at Argonne. |
| ^d | Quality control/quality assurance sample. |
| ^e | Unk, unknown. |
| ^f | NR, not recorded. |

Appendix C:
Coordinates Survey Data

TABLE C.1 Survey coordinates for monitoring locations at Morrill, Kansas.

| Well | Horizontal Location ^a (ft) | | Elevation ^b (ft AMSL) | |
|--|---------------------------------------|-----------|----------------------------------|------------------------|
| | Easting | Northing | Representative Ground Surface | Reference ^c |
| <i>Monitoring Locations Installed by the KDHE–GeoCore in 1995</i> | | | | |
| MW1S | 1957316.76 | 589130.20 | – | 1124.68 |
| MW1D | 1957314.45 | 589129.06 | – | 1124.63 |
| MW2S | 1958063.43 | 589789.61 | – | 1137.07 |
| MW3S | 1957333.78 | 589929.06 | – | 1135.76 |
| MW4S | 1956982.15 | 590083.24 | – | 1143.61 |
| MW5S | 1958089.03 | 589182.24 | – | 1122.21 |
| <i>Monitoring Locations Installed by CCC/USDA–Argonne during Phase I– Phase II in 2004</i> | | | | |
| MW6S | 1958149.44 | 588385.33 | 1091.4 | 1090.97 |
| MW7S | 1956967.99 | 589238.96 | 1120.4 | 1119.86 |
| MW8S | 1957169.82 | 588590.43 | 1099.0 | 1098.53 |
| <i>Monitoring Locations Installed by CCC/USDA–Argonne during Monitoring in 2006</i> | | | | |
| MW9S | 1956819.91 | 589243.57 | 1118.0 | 1118.31 |
| MW10S | 1956829.05 | 589081.48 | 1110.4 | 1110.78 |
| MW11S | 1957031.81 | 589542.25 | 1132.8 | 1133.08 |

^a Horizontal coordinates are target location centers. Northings and eastings are Kansas State Plane Coordinates. Horizontal datum is North American Datum (NAD) 83.

^b Vertical datum is National Geodetic Vertical Datum (NGVD) 88.

^c Location for measurement of water level.

Supplementary Material for Draft Report: Groundwater Monitoring at Morrill, Kansas, in September 2005 and March 2006, with Expansion of the Monitoring Network in January 2006

Applied Geosciences and Environmental Management Section,
Environmental Science Division,
Argonne National Laboratory, 9700 South Cass Avenue, Argonne, Illinois 60439

Contents:

| | |
|------------------------------|---|
| S1_watersamples.pdf | Supplement 1: Groundwater Sample Data |
| S2_waterlevels.pdf | Supplement 2: Water Level Data |
| S3_qualitycontrol.pdf | Supplement 3: Quality Control for Sample Collection, Handling, and Analysis |
| S4_COC-analytics.pdf | Supplement 4: Chain-of-Custody Forms and Outside Laboratory Data |
| S5_WasteCharacterization.pdf | Supplement 5: Waste Characterization Data and Disposal Authorization |

September 2006

Work sponsored by Commodity Credit Corporation, United States Department of Agriculture

Supplement 1:

Groundwater Sample Data

TABLE S1.1 Groundwater samples collected during 2005–2006 monitoring at Morrill, Kansas.

| Location | Sample | Depth (ft below TOC) | Sample Date | Medium | Type ^a | Sample Description |
|--------------------------------------|------------------|----------------------------|----------------|--------|-------------------|---|
| <i>September 2005 Sampling Event</i> | | | | | | |
| MW1S | MRMW1S-W-19259 | 11–51 | 09/13/05 | Water | MW | Depth to water from TOC = 24.16 ft. Depth of well = 53.9 ft below TOC. Sample collected after purging of 57 gal. |
| MW1D | MRMW1D-W-16518 | 63–88 | 09/13/05 | Water | MW | Depth to water from TOC = 23.72 ft. Depth of well = 88.6 ft below TOC. Sample collected after purging of 200 gal. |
| MW2S | MRMW2S-W-19264 | 13–53 | 09/14/05 | Water | MW | Depth to water from TOC = 33.68 ft. Depth of well = 53.33 ft below TOC. Sample collected after purging of 38 gal. |
| MW3S | MRMW3S-W-19261 | 18–48 | 09/13/05 | Water | MW | Depth to water from TOC = 25.60 ft. Depth of well = 47.6 ft below TOC. Sample collected after purging of 50 gal. |
| MW4S | MRMW4S-W-19262 | 17–47 | 09/14/05 | Water | MW | Depth to water from TOC = 36.21 ft. Depth of well = 47.81 ft below TOC. Sample collected after purging of 8 gal. |
| MW5S | MRMW5S-W-19260 | 15–55 | 09/13/05 | Water | MW | Depth to water from TOC = 22.66 ft. Depth of well = 54.20 ft below TOC. Sample collected after purging of 75 gal. |
| MW6S | MRMW6S-W-19263 | 10–25 | 09/14/05 | Water | MW | Depth to water from TOC = 4.7 ft. Depth of well = 26.9 ft below TOC. Sample collected after purging of 43 gal. |
| MW7S | MRMW7S-W-19258 | 20–45 | 09/12/05 | Water | MW | Depth to water from TOC = 17.57 ft. Depth of well = 46.94 ft below TOC. Sample collected after purging of 55 gal. |
| MW8S | MRMW8S-W-19265 | 10–25 | 09/14/05 | Water | MW | Depth to water from TOC = 4.02 ft. Depth of well = 26.82 ft below TOC. Sample collected after purging of 57 gal. |
| Isch | MRPRISCH-W-16513 | Unk ^b | 09/14/05 | Water | DW | Private well on co-op property between equipment wash area and railroad tracks. |
| Rillinger | MRPRILL-W-16512 | Unk | 09/14/05 | Water | DW | Rillinger lawn and garden well, 6-in.-diameter casing. Sampled from spigot. Pump prevented measurement of water level and well depth. |
| Stone | MRPRSTON-W-16511 | Unk–43 | 09/14/05 | Water | DW | Stone private well, 6 in. in diameter. Depth to water from TOC = 17.18 ft. Depth of well = 40 ft below TOC. |
| MW1S | MRMW1S-A-19259 | 11–51 | 09/13/05 | Vapor | MW | Well vapor effluent sample for dissolved hydrogen analysis. |
| MW2S | MRMW2S-A-19264 | 13–53 | 09/14/05 | Vapor | MW | Well vapor effluent sample for dissolved hydrogen analysis. |
| MW3S | MRMW3S-A-19261 | 18–48 | 09/13/05 | Vapor | MW | Well vapor effluent sample for dissolved hydrogen analysis. |
| MW4S | MRMW4S-A-19262 | 17–47 | 09/14/05 | Vapor | MW | Well vapor effluent sample for dissolved hydrogen analysis. |
| MW5S | MRMW5S-A-19260 | 15–55 | 09/13/05 | Vapor | MW | Well vapor effluent sample for dissolved hydrogen analysis. |
| MW7S | MRMW7S-A-19258 | 20–45 | 09/12/05 | Vapor | MW | Well vapor effluent sample for dissolved hydrogen analysis. |

TABLE S1.1 (Cont.)

| Location | Sample | Depth (ft below TOC) | Sample Date | Medium | Type ^a | Sample Description |
|----------------------------------|----------------|----------------------------|----------------|--------|-------------------|--|
| <i>March 2006 Sampling Event</i> | | | | | | |
| MW1S | MRMW1S-W-20008 | 11–51 | 03/22/06 | Water | MW | Existing 4-in. shallow well adjacent to city well pump house. Depth to water from TOC = 29.00 ft. Depth of well = 53.95 ft below TOC. Sample collected after purging of 48 gal at approximately 1 gpm. |
| MW1D | MRMW1D-W-19986 | 63–88 | 03/19/06 | Water | MW | Existing 4-in. deep well adjacent to city well pump house. Depth to water from TOC = 26.85 ft. Depth of well = 88.60 ft below TOC. Sample collected after purging of 112 gal at 1.6 gpm. |
| MW2S | MRMW2S-W-19992 | 13–53 | 03/21/06 | Water | MW | Existing 4-in. well NW of intersection of Walnut St. and Elliot St. Depth to water from TOC = 40.87 ft. Depth of well = 53.32 ft below TOC. Sample collected after purging of 27 gal at approximately 1 gpm. |
| MW3S | MRMW3S-W-19994 | 18–48 | 03/23/06 | Water | MW | Existing 4-in. well south of former CCC/USDA facility. Depth to water from TOC = 35.62 ft. Depth of well = 49.74 ft below TOC. Sample collected after purging of 28 gal at approximately 1 gpm. |
| MW4S | MRMW4S-W-19993 | 17–47 | 03/21/06 | Water | MW | Existing 4-in. well NW of former CCC/USDA facility. Depth to water from TOC = 44.55 ft. Depth of well = 47.72 ft below TOC. Sample collected after purging of 6 gal at approximately 1 gpm. |
| MW5S | MRMW5S-W-19996 | 15–55 | 03/22/06 | Water | MW | Existing 4-in. well south of intersection of Walnut St. and Roxanna St. Depth to water from TOC = 28.64 ft. Depth of well = 54.51 ft below TOC. Sample collected after purging of 50 gal at approximately 1.5 gpm. |
| MW6S | MRMW6S-W-19990 | 10–25 | 03/20/06 | Water | MW | Sample from existing 4-in. well south of co-op tank farm, adjacent to creek. Depth to water from TOC = 5.35 ft. Depth of well = 26.91 ft below TOC. Sample collected after purging of 43 gal. |
| MW7S | MRMW7S-W-20000 | 20–45 | 03/22/06 | Water | MW | Existing 4-in. well in cornfield north of town near highway. Depth to water from TOC = 22.45 ft. Depth of well = 46.98 ft below TOC. Sample collected after purging of 48 gal at approximately 1 gpm. |
| MW8S | MRMW8S-W-19991 | 10–25 | 03/20/06 | Water | MW | Sample from existing 4-in. well in bean field south of railroad. Depth to water from TOC = 4.57 ft. Depth of well = 26.41 ft below TOC. Sample collected after purging of 43 gal. |
| MW9S | MRMW9S-W-20004 | 38.83–53.83 | 03/22/06 | Water | MW | New 2-in. well approximately 60 ft west of MW7S. Depth to water from TOC = 20.20 ft. Depth of well = 58.62 ft below TOC. Sample collected after purging of 20 gal at approximately 1 gpm. |

TABLE S1.1 (Cont.)

| Location | Sample | Depth (ft below TOC) | Sample Date | Medium | Type ^a | Sample Description |
|--|--------------------|----------------------------|----------------|--------|-------------------|--|
| <i>March 2006 Sampling Event (cont.)</i> | | | | | | |
| MW10S | MRMW10S-W-19999 | 30–45 | 03/21/06 | Water | MW | New 2-in. well on the north edge of the haul road south of railroad tracks. Depth to water from TOC = 12.30 ft. Depth of well = 49.60 ft below TOC. Sample collected after purging of 19 gal. |
| MW11S | MRMW11S-W-20001 | 53–68 | 03/22/06 | Water | MW | New 2-in. well approximately 150 ft north of fenced gate along east fence line. Depth to water from TOC = 35.2 ft. Depth of well = 72.5 ft below TOC. Sample collected after purging of 20 gal at approximately 1 gpm. |
| Isch | MRISCH-W-19989 | Unk | 03/23/06 | Water | DW | Sample from private well on co-op property west of Fanning St. between the equipment wash area and the railroad tracks. Sample collected from spigot after purging of 20 gal. |
| Rillinger | MRRILINGER-W-19988 | Unk | 03/19/06 | Water | DW | Sample from 6-in. diameter steel-cased well at Rillinger residence. Sample collected at spigot after approximately 5 min of purging. |
| Stone | MRSTONE-W-19987 | Unk–43 | 03/19/06 | Water | DW | Sample from 6-in. diameter steel-cased well at James Stone residence. Depth to water from TOC = 17.42 ft. Depth of well = 40 ft below TOC. Sample collected after purging of 100 gal at approximately 1 gpm. |

^a Sample types: DW, domestic well; MW, monitoring well.

^b Unk, unknown.

TABLE S1.2 Field measurements made during groundwater monitoring at Morrill, Kansas, in September 2005 through March 2006.

| Location | Sample | Depth (ft below TOC) | Sample Date | Type ^a | Temperature (°C) | pH | Conductivity (µS/cm) | Concentration (mg/L) | | | Oxidation Reduction Potential (mV) | |
|-------------------------------|--------------------|----------------------------|----------------|-------------------|---------------------|------|-------------------------|----------------------|-------------------|----------|---|--|
| | | | | | | | | Dissolved Oxygen | Carbon Dioxide | Iron(II) | | |
| September 2005 Sampling Event | | | | | | | | | | | | |
| MW1S | MRMW1S-W-19259 | 11–51 | 9/13/05 | MW | 15.3 | 6.95 | 1174 | 7.17 | 55 | 0.00 | 200 | |
| MW1D | MRMW1D-W-16518 | 63–88 | 9/13/05 | MW | 15.5 | 6.56 | 2470 | NR ^b | NR | NR | NR | |
| MW2S | MRMW2S-W-19264 | 13–53 | 9/14/05 | MW | 15.2 | 6.94 | 801 | 7.85 | 65 | NR | 142 | |
| MW3S | MRMW3S-W-19261 | 18–48 | 9/13/05 | MW | 14.6 | 7.13 | 663 | 8.82 | 100 | 0.00 | 223 | |
| MW4S | MRMW4S-W-19262 | 17–47 | 9/14/05 | MW | 15.4 | 7.30 | 751 | 8.00 | 50 | 0.00 | 174 | |
| MW5S | MRMW5S-W-19260 | 15–55 | 9/13/05 | MW | 16.0 | 7.04 | 763 | 13.9 | 60 | 0.00 | 228 | |
| MW6S | MRMW6S-W-19263 | 10–25 | 9/14/05 | MW | 14.1 | 7.06 | 2350 | 0.01 | 60 | 0.00 | 54 | |
| MW7S | MRMW7S-W-19258 | 20–45 | 9/12/05 | MW | 15.0 | 7.26 | 760 | 8.35 | 50 | 0.00 | 240 | |
| MW8S | MRMW8S-W-19265 | 10–25 | 9/14/05 | MW | 14.1 | 7.30 | 853 | 0.02 | 40 | 0.00 | 65 | |
| Rilling | MRPRILL-W-16512 | Unk ^c | 9/14/05 | DW | NR | NR | NR | NR | NR | NR | NR | |
| Stone | MRPRSTON-W-16511 | Unk–43 | 9/14/05 | DW | 17.3 | 6.81 | 638 | NR | NR | NR | NR | |
| Isch | MRPRISCH-W-16513 | Unk | 9/14/05 | DW | 20.4 | 6.73 | 2300 | NR | NR | NR | NR | |
| March 2006 Sampling Event | | | | | | | | | | | | |
| MW1S | MRMW1S-W-20008 | 11–51 | 3/22/06 | MW | 15.5 | 7.23 | 927 | 9.94 | 40 | 0.01 | 220 | |
| MW1D | MRMW1D-W-19986 | 63–88 | 3/19/06 | MW | 12.9 | 6.95 | 2460 | 5.11 | NR | 0.00 | 230 | |
| MW2S | MRMW2S-W-19992 | 13–53 | 3/21/06 | MW | 13.0 | 7.07 | 863 | 9.40 | 25 | 0.14 | 262 | |
| MW3S | MRMW3S-W-19994 | 18–48 | 3/23/06 | MW | 8.9 | 7.16 | 662 | 6.74 | 25 | 0.08 | 269 | |
| MW4S | MRMW4S-W-19993 | 17–47 | 3/21/06 | MW | 6.7 | 7.25 | 729 | 10.9 | 25 | 0.00 | 154 | |
| MW5S | MRMW5S-W-19996 | 15–55 | 3/22/06 | MW | 13.9 | 7.25 | 781 | 4.52 | 35 | 0.06 | 234 | |
| MW6S | MRMW6S-W-19990 | 10–25 | 3/20/06 | MW | 9.8 | 6.91 | 2360 | 1.37 | 60 | 0.38 | 89 | |
| MW7S | MRMW7S-W-20000 | 20–45 | 3/22/06 | MW | 15.2 | 7.32 | 740 | 5.52 | 25 | 0.03 | 268 | |
| MW8S | MRMW8S-W-19991 | 10–25 | 3/20/06 | MW | 12.5 | 7.04 | 954 | 0.90 | 30 | 0.05 | 153 | |
| MW9S | MRMW9S-W-20004 | 38.83–53.83 | 3/22/06 | MW | 14.6 | 7.17 | 715 | 0.41 | 35 | 0.00 | 25 | |
| MW10S | MRMW10S-W-19999 | 30–45 | 3/21/06 | MW | 6.3 | 7.11 | 701 | 2.10 | 40 | 0.01 | 88 | |
| MW11S | MRMW11S-W-20001 | 53–68 | 3/22/06 | MW | 14.8 | 7.33 | 762 | 9.40 | 30 | 0.06 | 237 | |
| Rilling | MRRILINGER-W-19988 | Unk | 3/19/06 | DW | 11.9 | 7.05 | 2550 | NR | NR | NR | NR | |
| Stone | MRSTONE-W-19987 | Unk–43 | 3/19/06 | DW | 12.9 | 6.42 | 650 | NR | NR | 0.00 | 213 | |
| Isch | MRISCH-W-19989 | Unk | 3/23/06 | DW | 13.0 | 7.23 | 9400 | NR | NR | NR | NR | |

^a Sample types: DW, domestic well; MW, monitoring well.

^b NR, not recorded.

^c Unk, unknown.

TABLE S1.3 Results of organic analyses at the AGEM Laboratory for monitoring samples collected at Morrill, Kansas, in September 2005 and March 2006.

| Location | Sample | Depth (ft below TOC | Sample Date | Type ^a | Concentration (µg/L) | | |
|-------------------------------|--------------------|---------------------------|----------------|-------------------|-------------------------|--------------------|-----------------------|
| | | | | | Carbon Tetrachloride | Chloroform | Methylene Chloride |
| September 2005 Sampling Event | | | | | | | |
| MW1S | MRMW1S-W-19259 | 11–51 | 9/13/05 | MW | 35 | 1.7 | ND ^b |
| MW1D | MRMW1D-W-16518 | 63–88 | 9/13/05 | MW | ND | ND | ND |
| MW2S | MRMW2S-W-19264 | 13–53 | 9/14/05 | MW | ND | ND | ND |
| MW3S | MRMW3S-W-19261 | 18–48 | 9/13/05 | MW | 101 | 3.2 | ND |
| MW4S | MRMW4S-W-19262 | 17–47 | 9/14/05 | MW | ND | ND | ND |
| MW5S | MRMW5S-W-19260 | 15–55 | 9/13/05 | MW | 6.3 | 0.2 J ^c | ND |
| MW6S | MRMW6S-W-19263 | 10–25 | 9/14/05 | MW | ND | ND | ND |
| MW7S | MRMW7S-W-19258 | 20–45 | 9/12/05 | MW | 43 | 1.1 | ND |
| MW8S | MRMW8S-W-19265 | 10–25 | 9/14/05 | MW | 0.9 J | ND | ND |
| Isch | MRPRISCH-W-16513 | Unk ^d | 9/14/05 | DW | ND | ND | ND |
| Rillinger | MRPRILL-W-16512 | Unk | 9/14/05 | DW | 2.6 | 0.1 J | ND |
| Stone | MRPRSTON-W-16511 | Unk–43 | 9/14/05 | DW | 2.6 | 0.3 J | ND |
| March 2006 Sampling Event | | | | | | | |
| MW1S | MRMW1S-W-20008 | 11–51 | 3/22/06 | MW | 40 | 1.8 | ND |
| MW1D | MRMW1D-W-19986 | 63–88 | 3/19/06 | MW | ND | ND | 0.4 J B ^e |
| MW2S | MRMW2S-W-19992 | 13–53 | 3/21/06 | MW | ND | ND | ND |
| MW3S | MRMW3S-W-19994 | 18–48 | 3/23/06 | MW | 91 | 2.6 | ND |
| MW4S | MRMW4S-W-19993 | 17–47 | 3/21/06 | MW | ND | ND | ND |
| MW5S | MRMW5S-W-19996 | 15–55 | 3/22/06 | MW | 7.3 | 0.2 J | ND |
| MW6S | MRMW6S-W-19990 | 10–25 | 3/20/06 | MW | ND | ND | ND |
| MW7S | MRMW7S-W-20000 | 20–45 | 3/22/06 | MW | 21 | 0.4 J | ND |
| MW8S | MRMW8S-W-19991 | 10–25 | 3/20/06 | MW | 0.6 J | ND | 0.4 J B |
| MW9S | MRMW9S-W-20004 | 38.83–53.83 | 3/22/06 | MW | ND | ND | ND |
| MW10S | MRMW10S-W-19999 | 30–45 | 3/21/06 | MW | ND | ND | ND |
| MW11S | MRMW11S-W-20001 | 53–68 | 3/22/06 | MW | 39 | 0.9 J | ND |
| Isch | MRISCH-W-19989 | Unk | 3/23/06 | DW | ND | ND | ND |
| Rillinger | MRRILINGER-W-19988 | Unk | 3/19/06 | DW | ND | ND | 0.4 J B |
| Stone | MRSTONE-W-19987 | Unk–43 | 3/19/06 | DW | 14 | 0.8 J | 0.4 J B |

^a Sample types: DW, domestic water; MW, monitoring well.

^b ND, not detected at the instrument detection limit of 0.1 µg/L.

^c Qualifier J indicates an estimated concentration below the method quantitation limit of 1.0 µg/L.

^d Unk, unknown.

^e Qualifier B indicates that the compound was present in the method blank.

TABLE S1.4 Results of analyses for attenuation parameters at Severn-Trent Laboratories and Microseeps, Inc., on monitoring samples collected at Morrill, Kansas, in September 2005 and March 2006.

| Location | Sample | Depth (ft below TOC) | Sample Date | Concentration (mg/L) | | | | | | | |
|-------------------------------|-----------------|----------------------------|----------------|----------------------|-----------------|---------|----------|-------|-----------|-----------|---------|
| | | | | Total Alkalinity | Aluminum | Calcium | Chloride | Iron | Magnesium | Manganese | Nitrate |
| September 2005 Sampling Event | | | | | | | | | | | |
| MW1S | MRMW1S-W-19259 | 11–51 | 9/13/05 | 304 | < 0.2 | 126 | 85.4 | < 0.1 | 28.2 | < 0.015 | 14.2 |
| MW2S | MRMW2S-W-19264 | 13–53 | 9/14/05 | 289 | < 0.2 | 130 | 11.0 | < 0.1 | 21.4 | < 0.015 | 18.2 |
| MW3S | MRMW3S-W-19261 | 18–48 | 9/13/05 | 280 | < 0.2 | 106 | 3.28 | < 0.1 | 15.6 | < 0.015 | 13.5 |
| MW4S | MRMW4S-W-19262 | 17–47 | 9/14/05 | 292 | < 0.2 | 92.5 | 10.3 | < 0.1 | 34.1 | < 0.015 | 20.8 |
| MW5S | MRMW5S-W-19260 | 15–55 | 9/13/05 | 292 | < 0.2 | 102 | 11.4 | < 0.1 | 29.3 | < 0.015 | 18.3 |
| MW6S | MRMW6S-W-19263 | 10–25 | 9/14/05 | 261 | < 0.2 | 481 | 27.2 | < 0.1 | 104 | 0.330 | < 0.4 |
| MW7S | MRMW7S-W-19258 | 20–45 | 9/12/05 | 303 | < 0.2 | 105 | 12.0 | < 0.1 | 22.4 | < 0.015 | 18.0 |
| MW8S | MRMW8S-W-19265 | 10–25 | 9/14/05 | 285 | NR ^a | NR | 41.6 | NR | NR | NR | 10.4 |
| March 2006 Sampling Event | | | | | | | | | | | |
| MW1S | MRMW1S-W-20008 | 11–51 | 3/22/06 | 311 | < 0.2 | 120 | 87.0 | < 0.1 | 27.8 | < 0.015 | 15.2 |
| MW2S | MRMW2S-W-19992 | 13–53 | 3/21/06 | 301 | < 0.2 | 125 | 23.3 | < 0.1 | 31.4 | < 0.015 | 25.4 |
| MW3S | MRMW3S-W-19994 | 18–48 | 3/23/06 | 287 | < 0.2 | 90.5 | 3.85 | < 0.1 | 15.5 | < 0.015 | 15.2 |
| MW4S | MRMW4S-W-19993 | 17–47 | 3/21/06 | 222 | < 0.2 | 55.0 | 9.11 | < 0.1 | 23.4 | < 0.015 | 16.2 |
| MW5S | MRMW5S-W-19996 | 15–55 | 3/22/06 | 297 | < 0.2 | 99.1 | 13.1 | < 0.1 | 28.4 | < 0.015 | 22.0 |
| MW6S | MRMW6S-W-19990 | 10–25 | 3/20/06 | 263 | < 0.2 | 413 | 31.4 | < 0.1 | 86.2 | 0.263 | 0.321 |
| MW7S | MRMW7S-W-20000 | 20–45 | 3/22/06 | 304 | < 0.2 | 96.9 | 9.76 | < 0.1 | 20.4 | < 0.015 | 19.8 |
| MW8S | MRMW8S-W-19991 | 10–25 | 3/20/06 | 302 | < 0.2 | 110 | 26.8 | < 0.1 | 28.5 | < 0.015 | 8.97 |
| MW9S | MRMW9S-W-20004 | 38.83–53.83 | 3/22/06 | 350 | < 0.2 | 76.9 | 5.97 | < 0.1 | 33.7 | 0.0701 | 0.349 |
| MW10S | MRMW10S-W-19999 | 30–45 | 3/21/06 | 351 | < 0.2 | 86.3 | 6.07 | < 0.1 | 32.6 | 0.0644 | 0.357 |
| MW11S | MRMW11S-W-20001 | 53–68 | 3/22/06 | 316 | < 0.2 | 90.5 | 8.22 | < 0.1 | 30.5 | < 0.015 | 21.8 |

TABLE S1.4 (Cont.)

| Location | Sample | Depth (ft below TOC) | Sample Date | Concentration (mg/L) | | | | | | | |
|-------------------------------|-----------------|----------------------------|----------------|----------------------|----------|-----------|------------|-----------|---------|--------|---------|
| | | | | Nitrite | Nitrogen | Phosphate | Phosphorus | Potassium | Silicon | Sodium | Sulfate |
| September 2005 Sampling Event | | | | | | | | | | | |
| MW1S | MRMW1S-W-19259 | 11–51 | 9/13/05 | 0.0212 | 14.5 | < 0.20 | < 0.25 | < 5 | 7.52 | 41.1 | 31.1 |
| MW2S | MRMW2S-W-19264 | 13–53 | 9/14/05 | < 0.005 | 20.4 | 0.307 | < 0.25 | < 5 | 8.72 | 19.2 | 56.6 |
| MW3S | MRMW3S-W-19261 | 18–48 | 9/13/05 | < 0.005 | 14.6 | 0.374 | < 0.25 | < 5 | 7.04 | 25.9 | 28.0 |
| MW4S | MRMW4S-W-19262 | 17–47 | 9/14/05 | < 0.005 | 22.9 | 0.271 | < 0.25 | < 5 | 8.01 | 18.0 | 24.6 |
| MW5S | MRMW5S-W-19260 | 15–55 | 9/13/05 | 0.0148 | 20.9 | < 0.20 | < 0.25 | < 5 | 8.55 | 17.7 | 41.4 |
| MW6S | MRMW6S-W-19263 | 10–25 | 9/14/05 | < 0.005 | < 0.01 | 0.272 | < 0.25 | < 5 | 10.0 | 34.2 | 1330 |
| MW7S | MRMW7S-W-19258 | 20–45 | 9/12/05 | < 0.005 | 19.8 | < 0.20 | < 0.25 | < 5 | 7.53 | 26.7 | 23.3 |
| MW8S | MRMW8S-W-19265 | 10–25 | 9/14/05 | < 0.005 | 11.7 | 0.328 | NR | NR | NR | NR | 139 |
| March 2006 Sampling Event | | | | | | | | | | | |
| MW1S | MRMW1S-W-20008 | 11–51 | 3/22/06 | < 0.005 | 14.2 | < 0.20 | < 0.25 | < 5 | 7.45 | 37.3 | 39.3 |
| MW2S | MRMW2S-W-19992 | 13–53 | 3/21/06 | < 0.005 | 25.2 | < 0.20 | < 0.25 | < 5 | 8.29 | 18.8 | 51.0 |
| MW3S | MRMW3S-W-19994 | 18–48 | 3/23/06 | < 0.005 | 13.4 | < 0.20 | < 0.25 | < 5 | 7.27 | 20.1 | 22.8 |
| MW4S | MRMW4S-W-19993 | 17–47 | 3/21/06 | < 0.005 | 15.2 | < 0.20 | < 0.25 | < 5 | 5.85 | 12.9 | 18.2 |
| MW5S | MRMW5S-W-19996 | 15–55 | 3/22/06 | < 0.005 | 20.1 | < 0.20 | < 0.25 | < 5 | 7.91 | 16.3 | 48.5 |
| MW6S | MRMW6S-W-19990 | 10–25 | 3/20/06 | 0.0061 | < 0.01 | < 0.40 | < 0.25 | < 5 | 9.71 | 29.0 | 1560 |
| MW7S | MRMW7S-W-20000 | 20–45 | 3/22/06 | < 0.005 | 18.4 | < 0.20 | < 0.25 | < 5 | 7.26 | 20.6 | 25.8 |
| MW8S | MRMW8S-W-19991 | 10–25 | 3/20/06 | 0.0109 | 8.39 | < 0.20 | < 0.25 | < 5 | 8.22 | 24.3 | 159 |
| MW9S | MRMW9S-W-20004 | 38.83–53.83 | 3/22/06 | 0.0066 | 0.0427 | < 0.20 | < 0.25 | < 5 | 8.71 | 23.6 | 57.1 |
| MW10S | MRMW10S-W-19999 | 30–45 | 3/21/06 | < 0.005 | 0.162 | < 0.20 | < 0.25 | < 5 | 8.90 | 28.2 | 42.0 |
| MW11S | MRMW11S-W-20001 | 53–68 | 3/22/06 | 0.0052 | 20.3 | < 0.20 | < 0.25 | < 5 | 7.48 | 22.6 | 25.2 |

TABLE S1.4 (Cont.)

| Location | Sample | Depth (ft below TOC) | Sample Date | Total Organic Carbon (mg/L) | Dissolved Hydrogen (nM) | Concentration (µg/L) | | |
|-------------------------------|-----------------|----------------------------|----------------|--------------------------------------|-------------------------------|----------------------|--------|---------|
| | | | | | | Ethane | Ethene | Methane |
| September 2005 Sampling Event | | | | | | | | |
| MW1S | MRMW1S-W-19259 | 11–51 | 9/13/05 | < 1.00 | 2.7 | < 4 | < 3 | < 2 |
| MW2S | MRMW2S-W-19264 | 13–53 | 9/14/05 | < 1.00 | 2.4 | < 4 | < 3 | < 2 |
| MW3S | MRMW3S-W-19261 | 18–48 | 9/13/05 | < 1.00 | 2.8 | < 4 | < 3 | < 2 |
| MW4S | MRMW4S-W-19262 | 17–47 | 9/14/05 | < 1.00 | 8.5 | < 4 | < 3 | < 2 |
| MW5S | MRMW5S-W-19260 | 15–55 | 9/13/05 | < 1.00 | 31 | < 4 | < 3 | < 2 |
| MW6S | MRMW6S-W-19263 | 10–25 | 9/14/05 | < 1.00 | NA ^b | < 4 | < 3 | < 2 |
| MW7S | MRMW7S-W-19258 | 20–45 | 9/12/05 | < 1.00 | 7.2 | < 4 | < 3 | < 2 |
| MW8S | MRMW8S-W-19265 | 10–25 | 9/14/05 | < 1.00 | NA | < 4 | < 3 | < 2 |
| March 2006 Sampling Event | | | | | | | | |
| MW1S | MRMW1S-W-20008 | 11–51 | 3/22/06 | 1.68 | NA | < 4 | < 3 | < 2 |
| MW2S | MRMW2S-W-19992 | 13–53 | 3/21/06 | 7.63 | NA | < 4 | < 3 | < 2 |
| MW3S | MRMW3S-W-19994 | 18–48 | 3/23/06 | 1.95 | NA | < 4 | < 3 | < 2 |
| MW4S | MRMW4S-W-19993 | 17–47 | 3/21/06 | 9.28 | NA | < 4 | < 3 | < 2 |
| MW5S | MRMW5S-W-19996 | 15–55 | 3/22/06 | 2.38 | NA | < 4 | < 3 | < 2 |
| MW6S | MRMW6S-W-19990 | 10–25 | 3/20/06 | < 1.00 | NA | < 4 | < 3 | < 2 |
| MW7S | MRMW7S-W-20000 | 20–45 | 3/22/06 | 2.00 | NA | < 4 | < 3 | < 2 |
| MW8S | MRMW8S-W-19991 | 10–25 | 3/20/06 | 1.12 | NA | < 4 | < 3 | < 2 |
| MW9S | MRMW9S-W-20004 | 38.83–53.83 | 3/22/06 | 1.60 | NA | < 4 | < 3 | < 2 |
| MW10S | MRMW10S-W-19999 | 30–45 | 3/21/06 | 4.26 | NA | < 4 | < 3 | < 2 |
| MW11S | MRMW11S-W-20001 | 53–68 | 3/22/06 | 2.19 | NA | < 4 | < 3 | < 2 |

^a NR, not reported. Sample was filtered improperly; results are rejected as non-representative.

^b NA, not analyzed for dissolved hydrogen.

Supplement 2:

Water Level Data

TABLE S2.1 Hand-measured water levels at Morrill, Kansas, in July 2004 through June 2006.

| Well | Reference Elevation (ft AMSL) | July 15, 2004 | | August 31, 2004 | | March 18, 2005 | | September 12–14, 2005 | |
|-------|-------------------------------------|----------------------------|------------------------|----------------------------|------------------------|----------------------------|------------------------|----------------------------|------------------------|
| | | Depth (ft below TOC) | Elevation (ft AMSL) | Depth (ft below TOC) | Elevation (ft AMSL) | Depth (ft below TOC) | Elevation (ft AMSL) | Depth (ft below TOC) | Elevation (ft AMSL) |
| MW1S | 1124.68 | 27.37 | 1097.31 | 28.73 | 1095.95 | 31.03 | 1093.65 | 24.16 | 1100.52 |
| MW1D | 1124.63 | 27.40 | 1097.23 | 27.19 | 1097.44 | | | 23.72 | 1100.91 |
| MW2S | 1137.07 | 37.11 | 1099.96 | 39.07 | 1098.00 | 43.09 | 1093.98 | 33.68 | 1103.39 |
| MW3S | 1135.76 | 31.18 | 1104.58 | 33.13 | 1102.63 | 37.58 | 1098.18 | 25.60 | 1110.16 |
| MW4S | 1143.61 | 42.88 | 1100.73 | 43.94 | 1099.67 | 47.40 | 1096.21 | 36.21 | 1107.40 |
| MW5S | 1122.21 | 26.20 | 1096.01 | 28.16 | 1094.05 | 31.06 | 1091.15 | 22.66 | 1099.55 |
| MW6S | 1090.97 | 4.45 | 1086.52 | 4.54 | 1086.43 | 4.73 | 1086.24 | 4.70 | 1086.27 |
| MW7S | 1119.86 | 21.63 | 1098.23 | 22.64 | 1097.22 | | | 17.57 | 1102.29 |
| MW8S | 1098.53 | 4.84 | 1093.69 | 5.67 | 1092.86 | 5.43 | 1093.10 | 4.02 | 1094.51 |
| MW9S | 1118.31 | | | | | | | | |
| MW10S | 1110.78 | | | | | | | | |
| MW11S | 1133.08 | | | | | | | | |
| <hr/> | | | | | | | | | |
| Well | Reference Elevation (ft AMSL) | October 17, 2005 | | March 19–23, 2006 | | June 16, 2006 | | | |
| | | Depth (ft below TOC) | Elevation (ft AMSL) | Depth (ft below TOC) | Elevation (ft AMSL) | Depth (ft below TOC) | Elevation (ft AMSL) | | |
| MW1S | 1124.68 | 25.88 | 1098.80 | 29.00 | 1095.68 | 26.63 | 1098.05 | | |
| MW1D | 1124.63 | 24.11 | 1100.52 | 26.85 | 1097.78 | 25.65 | 1098.98 | | |
| MW2S | 1137.07 | 36.25 | 1100.82 | 40.87 | 1096.20 | 36.48 | 1100.59 | | |
| MW3S | 1135.76 | 28.84 | 1106.92 | 35.62 | 1100.14 | 28.28 | 1107.48 | | |
| MW4S | 1143.61 | 38.86 | 1104.75 | 44.55 | 1099.06 | 39.24 | 1104.37 | | |
| MW5S | 1122.21 | 25.19 | 1097.02 | 28.64 | 1093.57 | 26.31 | 1095.90 | | |
| MW6S | 1090.97 | 4.28 | 1086.69 | 5.35 | 1116.86 | 5.00 | 1085.97 | | |
| MW7S | 1119.86 | 19.30 | 1100.56 | 22.45 | 1097.41 | 20.02 | 1099.84 | | |
| MW8S | 1098.53 | 4.23 | 1094.30 | 4.57 | 1093.96 | 4.54 | 1093.99 | | |
| MW9S | 1118.31 | | | 20.20 | 1098.11 | 18.42 | 1099.89 | | |
| MW10S | 1110.78 | | | 12.30 | 1098.48 | 10.76 | 1100.02 | | |
| MW11S | 1133.08 | | | 35.20 | 1097.88 | 35.47 | 1097.61 | | |

TABLE S2.2 Automatically measured water levels at Morrill, July 15, 2004, to June 16, 2006.

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 7/15/2004 16:00 | 27.393 | 37.292 | 31.188 | 42.932 | 26.193 | | 21.625 | 4.857 |
| 7/15/2004 20:00 | 27.418 | 37.219 | 31.154 | 42.897 | 26.171 | 4.772 | 21.642 | 4.921 |
| 7/16/2004 0:00 | 27.403 | 37.17 | 31.154 | 42.925 | 26.143 | 4.753 | 21.649 | 4.915 |
| 7/16/2004 4:00 | 27.413 | 37.113 | 31.15 | 42.913 | 26.108 | 4.743 | 21.657 | 4.911 |
| 7/16/2004 8:00 | 27.455 | 37.134 | 31.202 | 42.895 | 26.119 | 4.738 | 21.671 | 4.898 |
| 7/16/2004 12:00 | 27.472 | 37.115 | 31.214 | 42.929 | 26.13 | 4.732 | 21.682 | 4.93 |
| 7/16/2004 16:00 | 27.483 | 37.078 | 31.206 | 42.939 | 26.126 | 4.761 | 21.69 | 4.968 |
| 7/16/2004 20:00 | 27.49 | 37.053 | 31.234 | 42.906 | 26.132 | 4.755 | 21.705 | 4.994 |
| 7/17/2004 0:00 | 27.54 | 37.078 | 31.303 | 42.936 | 26.149 | 4.747 | 21.727 | 4.983 |
| 7/17/2004 4:00 | 27.55 | 37.036 | 31.303 | 42.929 | 26.132 | 4.733 | 21.735 | 4.966 |
| 7/17/2004 8:00 | 27.569 | 37.027 | 31.349 | 42.939 | 26.1 | 4.747 | 21.748 | 4.96 |
| 7/17/2004 12:00 | 27.597 | 37.019 | 31.377 | 42.978 | 26.1 | 4.767 | 21.762 | 4.99 |
| 7/17/2004 16:00 | 27.584 | 36.963 | 31.343 | 42.95 | 26.07 | 4.763 | 21.762 | 5.024 |
| 7/17/2004 20:00 | 27.597 | 36.937 | 31.333 | 42.98 | 26.073 | 4.769 | 21.767 | 5.045 |
| 7/18/2004 0:00 | 27.617 | 36.967 | 31.369 | 42.985 | 26.082 | 4.769 | 21.781 | 5.032 |
| 7/18/2004 4:00 | 27.617 | 36.984 | 31.367 | 42.987 | 26.093 | 4.728 | 21.783 | 5.011 |
| 7/18/2004 8:00 | 27.634 | 37.025 | 31.387 | 42.989 | 26.119 | 4.732 | 21.789 | 4.996 |
| 7/18/2004 12:00 | 27.644 | 37.036 | 31.363 | 42.992 | 26.143 | 4.718 | 21.791 | 5.013 |
| 7/18/2004 16:00 | 27.637 | 37.047 | 31.319 | 42.98 | 26.16 | 4.763 | 21.789 | 5.05 |
| 7/18/2004 20:00 | 27.639 | 37.057 | 31.279 | 42.964 | 26.312 | 4.761 | 21.787 | 5.067 |
| 7/19/2004 0:00 | 27.646 | 37.119 | 31.287 | 42.941 | 26.285 | 4.718 | 21.794 | 5.052 |
| 7/19/2004 4:00 | 27.632 | 37.145 | 31.253 | 42.953 | 26.293 | 4.716 | 21.788 | 5.026 |
| 7/19/2004 8:00 | 27.632 | 37.177 | 31.24 | 42.908 | 26.304 | 4.707 | 21.785 | 5.016 |
| 7/19/2004 12:00 | 27.632 | 37.211 | 31.232 | 42.934 | 26.33 | 4.757 | 21.786 | 5.052 |
| 7/19/2004 16:00 | 27.641 | 37.23 | 31.19 | 42.895 | 26.349 | 4.775 | 21.787 | 5.086 |
| 7/19/2004 20:00 | 27.641 | 37.251 | 31.172 | 42.915 | 26.383 | 4.775 | 21.792 | 5.108 |
| 7/20/2004 0:00 | 27.662 | 37.324 | 31.214 | 42.925 | 26.424 | 4.763 | 21.806 | 5.093 |
| 7/20/2004 4:00 | 27.666 | 37.371 | 31.216 | 42.899 | 26.454 | 4.751 | 21.808 | 5.069 |
| 7/20/2004 8:00 | 27.696 | 37.426 | 31.277 | 42.938 | 26.491 | 4.765 | 21.823 | 5.057 |
| 7/20/2004 12:00 | 27.724 | 37.46 | 31.295 | 42.95 | 26.525 | 4.775 | 21.831 | 5.103 |
| 7/20/2004 16:00 | 27.713 | 37.51 | 31.283 | 42.927 | 26.577 | 4.777 | 21.835 | 5.14 |
| 7/20/2004 20:00 | 27.733 | 37.492 | 31.265 | 42.957 | 26.596 | 4.778 | 21.839 | 5.159 |
| 7/21/2004 0:00 | 27.753 | 37.52 | 31.287 | 42.938 | 26.607 | 4.747 | 21.848 | 5.142 |
| 7/21/2004 4:00 | 27.751 | 37.51 | 31.287 | 42.962 | 26.593 | 4.759 | 21.851 | 5.125 |
| 7/21/2004 8:00 | 27.773 | 37.522 | 31.325 | 42.971 | 26.581 | 4.736 | 21.862 | 5.119 |
| 7/21/2004 12:00 | 27.773 | 37.522 | 31.335 | 42.975 | 26.573 | 4.74 | 21.864 | 5.117 |
| 7/21/2004 16:00 | 27.791 | 37.544 | 31.381 | 42.985 | 26.573 | 4.769 | 21.877 | 5.125 |
| 7/21/2004 20:00 | 27.783 | 37.51 | 31.367 | 42.994 | 26.508 | 4.765 | 21.877 | 5.14 |
| 7/22/2004 0:00 | 27.806 | 37.524 | 31.421 | 43.003 | 26.463 | 4.755 | 21.891 | 5.127 |
| 7/22/2004 4:00 | 27.759 | 37.518 | 31.427 | 43.008 | 26.446 | 4.765 | 21.864 | 5.108 |
| 7/22/2004 8:00 | 27.818 | 37.557 | 31.484 | 43.017 | 26.452 | 4.759 | 21.904 | 5.1 |
| 7/22/2004 12:00 | 27.84 | 37.588 | 31.518 | 43.033 | 26.467 | 4.757 | 21.914 | 5.102 |
| 7/22/2004 16:00 | 27.855 | 37.633 | 31.55 | 43.047 | 26.502 | 4.767 | 21.922 | 5.106 |
| 7/22/2004 20:00 | 27.85 | 37.644 | 31.548 | 43.024 | 26.517 | 4.773 | 21.926 | 5.115 |
| 7/23/2004 0:00 | 27.875 | 37.71 | 31.596 | 43.038 | 26.558 | 4.765 | 21.935 | 5.104 |
| 7/23/2004 4:00 | 27.883 | 37.746 | 31.612 | 43.077 | 26.592 | 4.753 | 21.943 | 5.087 |
| 7/23/2004 8:00 | 27.9 | 37.802 | 31.649 | 43.059 | 26.631 | 4.757 | 21.953 | 5.081 |
| 7/23/2004 12:00 | 27.893 | 37.858 | 31.681 | 43.072 | 26.68 | 4.753 | 21.959 | 5.092 |
| 7/23/2004 16:00 | 27.925 | 37.883 | 31.677 | 43.082 | 26.721 | 4.759 | 21.964 | 5.094 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 7/23/2004 20:00 | 27.938 | 37.898 | 31.671 | 43.119 | 26.756 | 4.773 | 21.968 | 5.102 |
| 7/24/2004 0:00 | 27.952 | 37.962 | 31.711 | 43.133 | 26.807 | 4.761 | 21.976 | 5.092 |
| 7/24/2004 4:00 | 27.957 | 37.983 | 31.709 | 43.142 | 26.837 | 4.755 | 21.978 | 5.079 |
| 7/24/2004 8:00 | 27.97 | 38.028 | 31.741 | 43.149 | 26.865 | 4.742 | 21.987 | 5.069 |
| 7/24/2004 12:00 | 27.952 | 38.073 | 31.789 | 43.163 | 26.803 | 4.742 | 21.951 | 5.049 |
| 7/24/2004 16:00 | 27.898 | 38.045 | 31.8 | 43.172 | 26.721 | 4.738 | 21.879 | 5.041 |
| 7/24/2004 20:00 | 27.856 | 38.015 | 31.81 | 43.176 | 26.652 | 4.73 | 21.883 | 5.052 |
| 7/25/2004 0:00 | 27.841 | 38.022 | 31.834 | 43.197 | 26.627 | 4.74 | 21.898 | 5.043 |
| 7/25/2004 4:00 | 27.818 | 38.002 | 31.826 | 43.197 | 26.616 | 4.73 | 21.904 | 5.028 |
| 7/25/2004 8:00 | 27.811 | 38.009 | 31.842 | 43.204 | 26.62 | 4.736 | 21.914 | 5.016 |
| 7/25/2004 12:00 | 27.8 | 38.002 | 31.836 | 43.204 | 26.626 | 4.74 | 21.918 | 5.039 |
| 7/25/2004 16:00 | 27.765 | 37.979 | 31.8 | 43.176 | 26.639 | 4.779 | 21.912 | 5.073 |
| 7/25/2004 20:00 | 27.752 | 37.96 | 31.774 | 43.172 | 26.721 | 4.746 | 21.914 | 5.092 |
| 7/26/2004 0:00 | 27.775 | 37.979 | 31.781 | 43.206 | 26.663 | 4.734 | 21.923 | 5.076 |
| 7/26/2004 4:00 | 27.763 | 37.977 | 31.762 | 43.197 | 26.671 | 4.73 | 21.92 | 5.054 |
| 7/26/2004 8:00 | 27.771 | 37.998 | 31.772 | 43.193 | 26.689 | 4.68 | 21.925 | 5.042 |
| 7/26/2004 12:00 | 27.771 | 38.007 | 31.756 | 43.183 | 26.708 | 4.705 | 21.925 | 5.061 |
| 7/26/2004 16:00 | 27.753 | 37.977 | 31.703 | 43.144 | 26.717 | 4.725 | 21.915 | 5.095 |
| 7/26/2004 20:00 | 27.749 | 37.96 | 31.661 | 43.13 | 26.732 | 4.693 | 21.912 | 5.114 |
| 7/27/2004 0:00 | 27.746 | 37.983 | 31.673 | 43.163 | 26.744 | 4.643 | 21.922 | 5.099 |
| 7/27/2004 4:00 | 27.75 | 37.99 | 31.651 | 43.123 | 26.755 | 4.645 | 21.918 | 5.076 |
| 7/27/2004 8:00 | 27.763 | 38.007 | 31.653 | 43.114 | 26.77 | 4.625 | 21.922 | 5.061 |
| 7/27/2004 12:00 | 27.766 | 38.035 | 31.641 | 43.137 | 26.794 | 4.643 | 21.923 | 5.093 |
| 7/27/2004 16:00 | 27.768 | 38.13 | 31.593 | 43.1 | 26.876 | 4.657 | 21.918 | 5.125 |
| 7/27/2004 20:00 | 27.773 | 38.145 | 31.569 | 43.102 | 26.906 | 4.662 | 21.917 | 5.149 |
| 7/28/2004 0:00 | 27.778 | 38.137 | 31.589 | 43.133 | 26.893 | 4.602 | 21.927 | 5.132 |
| 7/28/2004 4:00 | 27.773 | 38.111 | 31.56 | 43.126 | 26.884 | 4.58 | 21.923 | 5.108 |
| 7/28/2004 8:00 | 27.785 | 38.122 | 31.569 | 43.086 | 26.895 | 4.567 | 21.927 | 5.098 |
| 7/28/2004 12:00 | 27.798 | 38.199 | 31.571 | 43.112 | 26.951 | 4.598 | 21.931 | 5.125 |
| 7/28/2004 16:00 | 27.8 | 38.22 | 31.55 | 43.116 | 27.029 | 4.614 | 21.933 | 5.162 |
| 7/28/2004 20:00 | 27.798 | 38.18 | 31.575 | 43.084 | 26.96 | 4.606 | 21.943 | 5.159 |
| 7/29/2004 0:00 | 27.751 | 38.128 | 31.595 | 43.089 | 26.813 | 4.606 | 21.898 | 5.136 |
| 7/29/2004 4:00 | 27.741 | 38.073 | 31.593 | 43.084 | 26.701 | 4.583 | 21.892 | 5.119 |
| 7/29/2004 8:00 | 27.741 | 38.06 | 31.621 | 43.089 | 26.65 | 4.6 | 21.902 | 5.109 |
| 7/29/2004 12:00 | 27.738 | 38.049 | 31.633 | 43.123 | 26.635 | 4.587 | 21.91 | 5.109 |
| 7/29/2004 16:00 | 27.718 | 38.011 | 31.601 | 43.119 | 26.62 | 4.614 | 21.906 | 5.132 |
| 7/29/2004 20:00 | 27.704 | 37.983 | 31.573 | 43.082 | 26.626 | 4.608 | 21.906 | 5.149 |
| 7/30/2004 0:00 | 27.711 | 38.007 | 31.607 | 43.116 | 26.652 | 4.6 | 21.913 | 5.13 |
| 7/30/2004 4:00 | 27.699 | 37.987 | 31.579 | 43.114 | 26.656 | 4.592 | 21.906 | 5.105 |
| 7/30/2004 8:00 | 27.704 | 37.996 | 31.585 | 43.075 | 26.673 | 4.596 | 21.911 | 5.09 |
| 7/30/2004 12:00 | 27.711 | 38.007 | 31.595 | 43.102 | 26.689 | 4.585 | 21.915 | 5.101 |
| 7/30/2004 16:00 | 27.711 | 38.002 | 31.581 | 43.072 | 26.706 | 4.6 | 21.911 | 5.137 |
| 7/30/2004 20:00 | 27.718 | 38.009 | 31.581 | 43.098 | 26.734 | 4.585 | 21.918 | 5.169 |
| 7/31/2004 0:00 | 27.743 | 38.062 | 31.637 | 43.114 | 26.775 | 4.554 | 21.933 | 5.154 |
| 7/31/2004 4:00 | 27.756 | 38.079 | 31.647 | 43.126 | 26.796 | 4.538 | 21.939 | 5.131 |
| 7/31/2004 8:00 | 27.776 | 38.113 | 31.679 | 43.133 | 26.822 | 4.552 | 21.95 | 5.122 |
| 7/31/2004 12:00 | 27.8 | 38.145 | 31.709 | 43.142 | 26.865 | 4.565 | 21.962 | 5.163 |
| 7/31/2004 16:00 | 27.805 | 38.143 | 31.685 | 43.146 | 26.944 | 4.592 | 21.964 | 5.203 |
| 7/31/2004 20:00 | 27.818 | 38.145 | 31.679 | 43.119 | 26.977 | 4.581 | 21.97 | 5.225 |
| 8/1/2004 0:00 | 27.84 | 38.173 | 31.729 | 43.142 | 26.975 | 4.569 | 21.985 | 5.21 |
| 8/1/2004 4:00 | 27.843 | 38.135 | 31.735 | 43.174 | 26.833 | 4.579 | 21.991 | 5.189 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 8/1/2004 8:00 | 27.847 | 38.096 | 31.726 | 43.144 | 26.76 | 4.565 | 21.989 | 5.167 |
| 8/1/2004 12:00 | 27.862 | 38.103 | 31.746 | 43.19 | 26.772 | 4.563 | 22.001 | 5.197 |
| 8/1/2004 16:00 | 27.855 | 38.075 | 31.697 | 43.149 | 26.82 | 4.62 | 21.993 | 5.24 |
| 8/1/2004 20:00 | 27.864 | 38.088 | 31.708 | 43.158 | 26.891 | 4.625 | 22.004 | 5.268 |
| 8/2/2004 0:00 | 27.875 | 38.081 | 31.714 | 43.195 | 26.904 | 4.608 | 22.01 | 5.246 |
| 8/2/2004 4:00 | 27.872 | 38.043 | 31.697 | 43.156 | 26.861 | 4.589 | 22.011 | 5.225 |
| 8/2/2004 8:00 | 27.877 | 37.987 | 31.673 | 43.167 | 26.807 | 4.587 | 22.006 | 5.215 |
| 8/2/2004 12:00 | 27.9 | 37.998 | 31.72 | 43.153 | 26.794 | 4.608 | 22.026 | 5.27 |
| 8/2/2004 16:00 | 27.897 | 37.957 | 31.695 | 43.156 | 26.777 | 4.606 | 22.026 | 5.304 |
| 8/2/2004 20:00 | 27.9 | 37.93 | 31.673 | 43.183 | 26.744 | 4.61 | 22.028 | 5.323 |
| 8/3/2004 0:00 | 27.905 | 37.913 | 31.691 | 43.158 | 26.727 | 4.577 | 22.035 | 5.3 |
| 8/3/2004 4:00 | 27.912 | 37.872 | 31.687 | 43.183 | 26.689 | 4.603 | 22.037 | 5.274 |
| 8/3/2004 8:00 | 27.922 | 37.846 | 31.7 | 43.181 | 26.652 | 4.57 | 22.043 | 5.266 |
| 8/3/2004 12:00 | 27.929 | 37.825 | 31.699 | 43.156 | 26.633 | 4.585 | 22.047 | 5.319 |
| 8/3/2004 16:00 | 27.922 | 37.78 | 31.663 | 43.151 | 26.615 | 4.616 | 22.047 | 5.36 |
| 8/3/2004 20:00 | 27.91 | 37.693 | 31.595 | 43.158 | 26.57 | 4.624 | 22.037 | 5.381 |
| 8/4/2004 0:00 | 27.927 | 37.71 | 31.673 | 43.172 | 26.506 | 4.603 | 22.062 | 5.379 |
| 8/4/2004 4:00 | 27.937 | 37.695 | 31.655 | 43.146 | 26.484 | 4.638 | 22.061 | 5.341 |
| 8/4/2004 8:00 | 27.962 | 37.761 | 31.754 | 43.167 | 26.503 | 4.601 | 22.084 | 5.328 |
| 8/4/2004 12:00 | 28.001 | 37.808 | 31.814 | 43.211 | 26.538 | 4.62 | 22.099 | 5.322 |
| 8/4/2004 16:00 | 28.029 | 37.846 | 31.852 | 43.232 | 26.579 | 4.626 | 22.112 | 5.36 |
| 8/4/2004 20:00 | 28.041 | 37.874 | 31.879 | 43.253 | 26.654 | 4.62 | 22.124 | 5.375 |
| 8/5/2004 0:00 | 28.068 | 37.96 | 31.935 | 43.273 | 26.725 | 4.628 | 22.142 | 5.354 |
| 8/5/2004 4:00 | 28.098 | 38.015 | 31.979 | 43.29 | 26.781 | 4.603 | 22.153 | 5.335 |
| 8/5/2004 8:00 | 28.128 | 38.088 | 32.032 | 43.308 | 26.841 | 4.603 | 22.169 | 5.32 |
| 8/5/2004 12:00 | 28.151 | 38.16 | 32.052 | 43.331 | 26.923 | 4.616 | 22.177 | 5.354 |
| 8/5/2004 16:00 | 28.158 | 38.167 | 32.03 | 43.294 | 26.977 | 4.649 | 22.179 | 5.396 |
| 8/5/2004 20:00 | 28.158 | 38.167 | 32.009 | 43.303 | 27.02 | 4.659 | 22.181 | 5.424 |
| 8/6/2004 0:00 | 28.183 | 38.229 | 32.045 | 43.352 | 27.078 | 4.667 | 22.192 | 5.401 |
| 8/6/2004 4:00 | 28.196 | 38.265 | 32.055 | 43.361 | 27.134 | 4.639 | 22.198 | 5.373 |
| 8/6/2004 8:00 | 28.216 | 38.31 | 32.068 | 43.366 | 27.183 | 4.624 | 22.203 | 5.348 |
| 8/6/2004 12:00 | 28.225 | 38.346 | 32.074 | 43.347 | 27.239 | 4.636 | 22.209 | 5.378 |
| 8/6/2004 16:00 | 28.213 | 38.346 | 32.027 | 43.373 | 27.278 | 4.665 | 22.205 | 5.422 |
| 8/6/2004 20:00 | 28.218 | 38.32 | 31.991 | 43.373 | 27.261 | 4.671 | 22.204 | 5.442 |
| 8/7/2004 0:00 | 28.24 | 38.359 | 32.013 | 43.382 | 27.308 | 4.638 | 22.215 | 5.418 |
| 8/7/2004 4:00 | 28.24 | 38.346 | 31.985 | 43.37 | 27.325 | 4.644 | 22.211 | 5.382 |
| 8/7/2004 8:00 | 28.25 | 38.366 | 31.999 | 43.368 | 27.342 | 4.652 | 22.217 | 5.361 |
| 8/7/2004 12:00 | 28.253 | 38.368 | 31.985 | 43.37 | 27.357 | 4.65 | 22.217 | 5.389 |
| 8/7/2004 16:00 | 28.251 | 38.344 | 31.947 | 43.329 | 27.368 | 4.675 | 22.213 | 5.444 |
| 8/7/2004 20:00 | 28.255 | 38.342 | 31.929 | 43.347 | 27.39 | 4.685 | 22.219 | 5.474 |
| 8/8/2004 0:00 | 28.25 | 38.393 | 31.963 | 43.364 | 27.42 | 4.671 | 22.231 | 5.446 |
| 8/8/2004 4:00 | 28.275 | 38.41 | 31.969 | 43.331 | 27.4 | 4.65 | 22.234 | 5.421 |
| 8/8/2004 8:00 | 28.31 | 38.459 | 32.003 | 43.368 | 27.42 | 4.663 | 22.246 | 5.404 |
| 8/8/2004 12:00 | 28.31 | 38.483 | 32.005 | 43.375 | 27.482 | 4.655 | 22.246 | 5.412 |
| 8/8/2004 16:00 | 28.335 | 38.527 | 32.009 | 43.361 | 27.564 | 4.669 | 22.252 | 5.466 |
| 8/8/2004 20:00 | 28.327 | 38.579 | 32.033 | 43.364 | 27.534 | 4.671 | 22.267 | 5.47 |
| 8/9/2004 0:00 | 28.342 | 38.615 | 32.061 | 43.37 | 27.538 | 4.652 | 22.273 | 5.442 |
| 8/9/2004 4:00 | 28.369 | 38.636 | 32.072 | 43.405 | 27.555 | 4.644 | 22.279 | 5.419 |
| 8/9/2004 8:00 | 28.402 | 38.681 | 32.11 | 43.417 | 27.586 | 4.671 | 22.292 | 5.406 |
| 8/9/2004 12:00 | 28.417 | 38.816 | 32.13 | 43.435 | 27.678 | 4.702 | 22.302 | 5.462 |
| 8/9/2004 16:00 | 28.417 | 38.805 | 32.108 | 43.447 | 27.687 | 4.718 | 22.292 | 5.509 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 8/9/2004 20:00 | 28.427 | 38.792 | 32.11 | 43.454 | 27.7 | 4.71 | 22.308 | 5.538 |
| 8/10/2004 0:00 | 28.439 | 38.805 | 32.13 | 43.44 | 27.71 | 4.687 | 22.316 | 5.509 |
| 8/10/2004 4:00 | 28.444 | 38.809 | 32.142 | 43.447 | 27.719 | 4.673 | 22.321 | 5.485 |
| 8/10/2004 8:00 | 28.476 | 38.863 | 32.19 | 43.486 | 27.751 | 4.685 | 22.335 | 5.472 |
| 8/10/2004 12:00 | 28.476 | 38.856 | 32.174 | 43.458 | 27.766 | 4.683 | 22.333 | 5.485 |
| 8/10/2004 16:00 | 28.466 | 38.818 | 32.138 | 43.488 | 27.764 | 4.72 | 22.331 | 5.536 |
| 8/10/2004 20:00 | 28.476 | 38.835 | 32.162 | 43.498 | 27.792 | 4.702 | 22.345 | 5.545 |
| 8/11/2004 0:00 | 28.486 | 38.873 | 32.176 | 43.472 | 27.805 | 4.688 | 22.349 | 5.509 |
| 8/11/2004 4:00 | 28.481 | 38.867 | 32.17 | 43.498 | 27.807 | 4.636 | 22.351 | 5.475 |
| 8/11/2004 8:00 | 28.518 | 38.92 | 32.215 | 43.511 | 27.84 | 4.669 | 22.362 | 5.462 |
| 8/11/2004 12:00 | 28.533 | 38.933 | 32.214 | 43.484 | 27.898 | 4.687 | 22.364 | 5.477 |
| 8/11/2004 16:00 | 28.526 | 38.927 | 32.201 | 43.514 | 27.923 | 4.708 | 22.366 | 5.52 |
| 8/11/2004 20:00 | 28.546 | 38.942 | 32.208 | 43.521 | 27.949 | 4.731 | 22.372 | 5.552 |
| 8/12/2004 0:00 | 28.546 | 38.968 | 32.227 | 43.528 | 27.973 | 4.708 | 22.38 | 5.52 |
| 8/12/2004 4:00 | 28.551 | 38.961 | 32.22 | 43.498 | 27.979 | 4.681 | 22.38 | 5.484 |
| 8/12/2004 8:00 | 28.573 | 38.995 | 32.246 | 43.535 | 27.975 | 4.685 | 22.387 | 5.471 |
| 8/12/2004 12:00 | 28.58 | 38.995 | 32.249 | 43.537 | 27.96 | 4.7 | 22.391 | 5.482 |
| 8/12/2004 16:00 | 28.583 | 38.989 | 32.255 | 43.546 | 27.967 | 4.755 | 22.397 | 5.533 |
| 8/12/2004 20:00 | 28.578 | 39.006 | 32.271 | 43.558 | 27.977 | 4.735 | 22.405 | 5.565 |
| 8/13/2004 0:00 | 28.615 | 39.046 | 32.299 | 43.541 | 28.007 | 4.739 | 22.416 | 5.539 |
| 8/13/2004 4:00 | 28.618 | 39.063 | 32.315 | 43.578 | 28.016 | 4.704 | 22.422 | 5.507 |
| 8/13/2004 8:00 | 28.635 | 39.089 | 32.337 | 43.588 | 28.04 | 4.718 | 22.428 | 5.488 |
| 8/13/2004 12:00 | 28.655 | 39.136 | 32.351 | 43.597 | 28.068 | 4.738 | 22.436 | 5.522 |
| 8/13/2004 16:00 | 28.675 | 39.262 | 32.343 | 43.608 | 28.165 | 4.734 | 22.439 | 5.572 |
| 8/13/2004 20:00 | 28.662 | 39.313 | 32.353 | 43.592 | 28.203 | 4.741 | 22.447 | 5.597 |
| 8/14/2004 0:00 | 28.68 | 39.288 | 32.369 | 43.636 | 28.18 | 4.769 | 22.455 | 5.569 |
| 8/14/2004 4:00 | 28.695 | 39.281 | 32.381 | 43.618 | 28.182 | 4.741 | 22.461 | 5.544 |
| 8/14/2004 8:00 | 28.705 | 39.296 | 32.404 | 43.662 | 28.19 | 4.747 | 22.468 | 5.525 |
| 8/14/2004 12:00 | 28.735 | 39.392 | 32.42 | 43.673 | 28.266 | 4.734 | 22.476 | 5.574 |
| 8/14/2004 16:00 | 28.725 | 39.339 | 32.406 | 43.68 | 28.246 | 4.798 | 22.478 | 5.621 |
| 8/14/2004 20:00 | 28.727 | 39.32 | 32.41 | 43.692 | 28.244 | 4.778 | 22.484 | 5.65 |
| 8/15/2004 0:00 | 28.742 | 39.347 | 32.432 | 43.703 | 28.259 | 4.753 | 22.493 | 5.619 |
| 8/15/2004 4:00 | 28.752 | 39.356 | 32.44 | 43.703 | 28.268 | 4.761 | 22.5 | 5.587 |
| 8/15/2004 8:00 | 28.764 | 39.367 | 32.452 | 43.678 | 28.283 | 4.739 | 22.505 | 5.564 |
| 8/15/2004 12:00 | 28.777 | 39.388 | 32.462 | 43.719 | 28.352 | 4.743 | 22.511 | 5.606 |
| 8/15/2004 16:00 | 28.769 | 39.364 | 32.438 | 43.717 | 28.365 | 4.776 | 22.511 | 5.64 |
| 8/15/2004 20:00 | 28.759 | 39.324 | 32.415 | 43.71 | 28.354 | 4.786 | 22.509 | 5.672 |
| 8/16/2004 0:00 | 28.767 | 39.337 | 32.422 | 43.685 | 28.313 | 4.734 | 22.517 | 5.642 |
| 8/16/2004 4:00 | 28.759 | 39.305 | 32.4 | 43.703 | 28.296 | 4.724 | 22.513 | 5.604 |
| 8/16/2004 8:00 | 28.734 | 39.309 | 32.404 | 43.671 | 28.298 | 4.73 | 22.521 | 5.587 |
| 8/16/2004 12:00 | 28.779 | 39.322 | 32.398 | 43.701 | 28.322 | 4.747 | 22.521 | 5.636 |
| 8/16/2004 16:00 | 28.769 | 39.292 | 32.371 | 43.687 | 28.335 | 4.767 | 22.517 | 5.687 |
| 8/16/2004 20:00 | 28.772 | 39.281 | 32.363 | 43.68 | 28.317 | 4.759 | 22.523 | 5.711 |
| 8/17/2004 0:00 | 28.762 | 39.309 | 32.373 | 43.685 | 28.33 | 4.752 | 22.528 | 5.672 |
| 8/17/2004 4:00 | 28.779 | 39.296 | 32.357 | 43.678 | 28.328 | 4.72 | 22.528 | 5.632 |
| 8/17/2004 8:00 | 28.784 | 39.311 | 32.365 | 43.671 | 28.337 | 4.724 | 22.532 | 5.602 |
| 8/17/2004 12:00 | 28.802 | 39.337 | 32.373 | 43.68 | 28.363 | 4.755 | 22.538 | 5.656 |
| 8/17/2004 16:00 | 28.809 | 39.33 | 32.361 | 43.685 | 28.384 | 4.757 | 22.542 | 5.72 |
| 8/17/2004 20:00 | 28.799 | 39.317 | 32.343 | 43.696 | 28.41 | 4.771 | 22.546 | 5.734 |
| 8/18/2004 0:00 | 28.814 | 39.352 | 32.351 | 43.696 | 28.399 | 4.773 | 22.552 | 5.696 |
| 8/18/2004 4:00 | 28.809 | 39.334 | 32.327 | 43.685 | 28.395 | 4.719 | 22.548 | 5.649 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 8/18/2004 8:00 | 28.779 | 39.3 | 32.297 | 43.662 | 28.384 | 4.734 | 22.538 | 5.611 |
| 8/18/2004 12:00 | 28.811 | 39.322 | 32.271 | 43.664 | 28.414 | 4.736 | 22.55 | 5.677 |
| 8/18/2004 16:00 | 28.812 | 39.313 | 32.227 | 43.662 | 28.427 | 4.762 | 22.552 | 5.745 |
| 8/18/2004 20:00 | 28.826 | 39.362 | 32.255 | 43.673 | 28.442 | 4.785 | 22.565 | 5.765 |
| 8/19/2004 0:00 | 28.868 | 39.473 | 32.329 | 43.701 | 28.49 | 4.764 | 22.588 | 5.741 |
| 8/19/2004 4:00 | 28.891 | 39.524 | 32.369 | 43.722 | 28.52 | 4.752 | 22.6 | 5.709 |
| 8/19/2004 8:00 | 28.906 | 39.557 | 32.394 | 43.71 | 28.546 | 4.758 | 22.608 | 5.686 |
| 8/19/2004 12:00 | 28.918 | 39.569 | 32.406 | 43.747 | 28.563 | 4.769 | 22.615 | 5.712 |
| 8/19/2004 16:00 | 28.95 | 39.55 | 32.39 | 43.715 | 28.567 | 4.785 | 22.617 | 5.741 |
| 8/19/2004 20:00 | 28.911 | 39.52 | 32.371 | 43.733 | 28.597 | 4.797 | 22.615 | 5.737 |
| 8/20/2004 0:00 | 28.916 | 39.537 | 32.377 | 43.736 | 28.625 | 4.754 | 22.621 | 5.709 |
| 8/20/2004 4:00 | 28.92 | 39.535 | 32.371 | 43.731 | 28.638 | 4.76 | 22.621 | 5.68 |
| 8/20/2004 8:00 | 28.923 | 39.542 | 32.377 | 43.731 | 28.642 | 4.744 | 22.627 | 5.654 |
| 8/20/2004 12:00 | 28.945 | 39.642 | 32.402 | 43.712 | 28.713 | 4.76 | 22.637 | 5.688 |
| 8/20/2004 16:00 | 28.958 | 39.736 | 32.394 | 43.717 | 28.785 | 4.773 | 22.639 | 5.755 |
| 8/20/2004 20:00 | 28.958 | 39.742 | 32.408 | 43.752 | 28.785 | 4.797 | 22.644 | 5.789 |
| 8/21/2004 0:00 | 28.988 | 39.738 | 32.438 | 43.768 | 28.778 | 4.766 | 22.656 | 5.754 |
| 8/21/2004 4:00 | 28.992 | 39.697 | 32.448 | 43.752 | 28.761 | 4.764 | 22.66 | 5.716 |
| 8/21/2004 8:00 | 29.002 | 39.687 | 32.482 | 43.786 | 28.737 | 4.76 | 22.67 | 5.693 |
| 8/21/2004 12:00 | 28.992 | 39.644 | 32.484 | 43.796 | 28.709 | 4.758 | 22.675 | 5.719 |
| 8/21/2004 16:00 | 28.992 | 39.552 | 32.44 | 43.756 | 28.688 | 4.779 | 22.666 | 5.782 |
| 8/21/2004 20:00 | 28.995 | 39.499 | 32.434 | 43.749 | 28.67 | 4.769 | 22.67 | 5.806 |
| 8/22/2004 0:00 | 29.007 | 39.475 | 32.444 | 43.756 | 28.653 | 4.773 | 22.675 | 5.763 |
| 8/22/2004 4:00 | 28.988 | 39.396 | 32.424 | 43.745 | 28.621 | 4.752 | 22.671 | 5.719 |
| 8/22/2004 8:00 | 28.995 | 39.356 | 32.432 | 43.768 | 28.604 | 4.775 | 22.673 | 5.689 |
| 8/22/2004 12:00 | 28.992 | 39.302 | 32.428 | 43.74 | 28.582 | 4.762 | 22.677 | 5.74 |
| 8/22/2004 16:00 | 28.985 | 39.238 | 32.412 | 43.759 | 28.559 | 4.797 | 22.675 | 5.802 |
| 8/22/2004 20:00 | 28.99 | 39.198 | 32.414 | 43.729 | 28.543 | 4.817 | 22.681 | 5.823 |
| 8/23/2004 0:00 | 29.002 | 39.189 | 32.436 | 43.761 | 28.535 | 4.791 | 22.689 | 5.789 |
| 8/23/2004 4:00 | 29.01 | 39.142 | 32.444 | 43.761 | 28.509 | 4.785 | 22.692 | 5.757 |
| 8/23/2004 8:00 | 29.005 | 39.097 | 32.444 | 43.729 | 28.49 | 4.787 | 22.693 | 5.721 |
| 8/23/2004 12:00 | 29.005 | 39.068 | 32.456 | 43.763 | 28.468 | 4.776 | 22.699 | 5.728 |
| 8/23/2004 16:00 | 28.997 | 39.008 | 32.444 | 43.729 | 28.425 | 4.789 | 22.697 | 5.724 |
| 8/23/2004 20:00 | 28.983 | 38.937 | 32.432 | 43.726 | 28.388 | 4.784 | 22.7 | 5.711 |
| 8/24/2004 0:00 | 29.01 | 38.91 | 32.452 | 43.759 | 28.38 | 4.756 | 22.704 | 5.69 |
| 8/24/2004 4:00 | 29 | 38.854 | 32.46 | 43.756 | 28.35 | 4.762 | 22.704 | 5.673 |
| 8/24/2004 8:00 | 28.943 | 38.835 | 32.482 | 43.772 | 27.986 | 4.712 | 22.625 | 5.551 |
| 8/24/2004 12:00 | 28.829 | 38.688 | 32.454 | 43.77 | 27.792 | 4.702 | 22.451 | 5.545 |
| 8/24/2004 16:00 | 28.739 | 38.579 | 32.44 | 43.766 | 27.701 | 4.737 | 22.437 | 5.63 |
| 8/24/2004 20:00 | 28.707 | 38.508 | 32.462 | 43.749 | 27.637 | 4.745 | 22.456 | 5.658 |
| 8/25/2004 0:00 | 28.655 | 38.451 | 32.438 | 43.742 | 27.57 | 4.729 | 22.46 | 5.594 |
| 8/25/2004 4:00 | 28.575 | 38.359 | 32.458 | 43.747 | 27.422 | 4.714 | 22.321 | 5.579 |
| 8/25/2004 8:00 | 28.516 | 38.284 | 32.466 | 43.763 | 27.361 | 4.706 | 22.346 | 5.56 |
| 8/25/2004 12:00 | 28.488 | 38.261 | 32.468 | 43.761 | 27.329 | 4.702 | 22.368 | 5.556 |
| 8/25/2004 16:00 | 28.441 | 38.216 | 32.456 | 43.756 | 27.316 | 4.751 | 22.375 | 5.592 |
| 8/25/2004 20:00 | 28.449 | 38.211 | 32.466 | 43.752 | 27.327 | 4.733 | 22.397 | 5.628 |
| 8/26/2004 0:00 | 28.451 | 38.235 | 32.482 | 43.733 | 27.353 | 4.73 | 22.412 | 5.586 |
| 8/26/2004 4:00 | 28.439 | 38.224 | 32.48 | 43.759 | 27.366 | 4.699 | 22.417 | 5.548 |
| 8/26/2004 8:00 | 28.449 | 38.244 | 32.494 | 43.763 | 27.394 | 4.708 | 22.429 | 5.518 |
| 8/26/2004 12:00 | 28.446 | 38.246 | 32.49 | 43.761 | 27.413 | 4.735 | 22.435 | 5.544 |
| 8/26/2004 16:00 | 28.431 | 38.214 | 32.46 | 43.754 | 27.417 | 4.73 | 22.431 | 5.593 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 8/26/2004 20:00 | 28.429 | 38.228 | 32.458 | 43.749 | 27.45 | 4.732 | 22.439 | 5.625 |
| 8/27/2004 0:00 | 28.458 | 38.305 | 32.504 | 43.738 | 27.488 | 4.7 | 22.458 | 5.605 |
| 8/27/2004 4:00 | 28.481 | 38.361 | 32.534 | 43.786 | 27.525 | 4.718 | 22.472 | 5.576 |
| 8/27/2004 8:00 | 28.499 | 38.414 | 32.567 | 43.803 | 27.568 | 4.712 | 22.487 | 5.552 |
| 8/27/2004 12:00 | 28.52 | 38.451 | 32.585 | 43.816 | 27.6 | 4.724 | 22.499 | 5.557 |
| 8/27/2004 16:00 | 28.513 | 38.444 | 32.573 | 43.793 | 27.613 | 4.735 | 22.501 | 5.591 |
| 8/27/2004 20:00 | 28.523 | 38.468 | 32.589 | 43.826 | 27.645 | 4.747 | 22.51 | 5.614 |
| 8/28/2004 0:00 | 28.555 | 38.551 | 32.635 | 43.844 | 27.691 | 4.743 | 22.53 | 5.597 |
| 8/28/2004 4:00 | 28.565 | 38.568 | 32.635 | 43.853 | 27.708 | 4.753 | 22.536 | 5.563 |
| 8/28/2004 8:00 | 28.58 | 38.61 | 32.659 | 43.839 | 27.736 | 4.737 | 22.547 | 5.542 |
| 8/28/2004 12:00 | 28.6 | 38.638 | 32.673 | 43.849 | 27.77 | 4.765 | 22.557 | 5.561 |
| 8/28/2004 16:00 | 28.597 | 38.623 | 32.659 | 43.886 | 27.796 | 4.753 | 22.559 | 5.608 |
| 8/28/2004 20:00 | 28.6 | 38.628 | 32.663 | 43.886 | 27.805 | 4.757 | 22.567 | 5.636 |
| 8/29/2004 0:00 | 28.625 | 38.677 | 32.685 | 43.897 | 27.835 | 4.74 | 22.576 | 5.602 |
| 8/29/2004 4:00 | 28.612 | 38.664 | 32.671 | 43.872 | 27.837 | 4.726 | 22.578 | 5.561 |
| 8/29/2004 8:00 | 28.627 | 38.688 | 32.689 | 43.904 | 27.856 | 4.716 | 22.586 | 5.54 |
| 8/29/2004 12:00 | 28.642 | 38.715 | 32.689 | 43.911 | 27.88 | 4.722 | 22.592 | 5.566 |
| 8/29/2004 16:00 | 28.629 | 38.683 | 32.655 | 43.9 | 27.884 | 4.742 | 22.588 | 5.625 |
| 8/29/2004 20:00 | 28.627 | 38.672 | 32.641 | 43.9 | 27.906 | 4.748 | 22.59 | 5.662 |
| 8/30/2004 0:00 | 28.647 | 38.722 | 32.661 | 43.906 | 27.917 | 4.736 | 22.6 | 5.632 |
| 8/30/2004 4:00 | 28.657 | 38.749 | 32.679 | 43.918 | 27.934 | 4.718 | 22.607 | 5.604 |
| 8/30/2004 8:00 | 28.674 | 38.786 | 32.697 | 43.92 | 27.962 | 4.746 | 22.615 | 5.583 |
| 8/30/2004 12:00 | 28.699 | 38.852 | 32.71 | 43.902 | 28.013 | 4.732 | 22.623 | 5.647 |
| 8/30/2004 16:00 | 28.679 | 38.85 | 32.709 | 43.911 | 28.026 | 4.763 | 22.622 | 5.713 |
| 8/30/2004 20:00 | 28.712 | 38.863 | 32.717 | 43.941 | 28.05 | 4.749 | 22.638 | 5.743 |
| 8/31/2004 0:00 | 28.739 | 38.92 | 32.749 | 43.955 | 28.078 | 4.759 | 22.65 | 5.704 |
| 8/31/2004 4:00 | 28.739 | 38.92 | 32.745 | 43.96 | 28.084 | 4.773 | 22.654 | 5.66 |
| 8/31/2004 8:00 | 28.757 | 38.952 | 32.762 | 43.948 | 28.104 | 4.742 | 22.663 | 5.632 |
| 8/31/2004 12:00 | 28.772 | 38.967 | 32.768 | 43.948 | 28.125 | 4.75 | 22.669 | 5.675 |
| 8/31/2004 16:00 | 28.762 | 38.954 | 32.741 | 43.96 | 28.136 | 4.783 | 22.667 | 5.72 |
| 8/31/2004 20:00 | 28.768 | 38.961 | 33.132 | 43.932 | 28.156 | 4.791 | 22.675 | 5.745 |
| 9/1/2004 0:00 | 28.783 | 38.995 | 33.15 | 43.967 | 28.175 | 4.76 | 22.682 | 5.702 |
| 9/1/2004 4:00 | 28.798 | 39.023 | 33.162 | 43.969 | 28.186 | 4.744 | 22.689 | 5.667 |
| 9/1/2004 8:00 | 28.801 | 39.051 | 33.176 | 43.948 | 28.201 | 4.742 | 22.694 | 5.639 |
| 9/1/2004 12:00 | 28.816 | 39.063 | 33.174 | 43.98 | 28.218 | 4.762 | 22.698 | 5.682 |
| 9/1/2004 16:00 | 28.806 | 39.048 | 33.146 | 43.973 | 28.259 | 4.785 | 22.698 | 5.752 |
| 9/1/2004 20:00 | 28.806 | 39.04 | 33.136 | 43.973 | 28.278 | 4.777 | 22.702 | 5.769 |
| 9/2/2004 0:00 | 28.818 | 39.057 | 33.144 | 43.939 | 28.25 | 4.754 | 22.706 | 5.726 |
| 9/2/2004 4:00 | 28.816 | 39.048 | 33.138 | 43.941 | 28.248 | 4.756 | 22.709 | 5.688 |
| 9/2/2004 8:00 | 28.818 | 39.051 | 33.138 | 43.937 | 28.248 | 4.743 | 22.71 | 5.654 |
| 9/2/2004 12:00 | 28.821 | 39.044 | 33.126 | 43.962 | 28.256 | 4.752 | 22.709 | 5.701 |
| 9/2/2004 16:00 | 28.811 | 39.012 | 33.096 | 43.948 | 28.259 | 4.779 | 22.706 | 5.773 |
| 9/2/2004 20:00 | 28.811 | 39.01 | 33.088 | 43.911 | 28.258 | 4.795 | 22.71 | 5.797 |
| 9/3/2004 0:00 | 28.826 | 39.051 | 33.108 | 43.948 | 28.291 | 4.785 | 22.72 | 5.754 |
| 9/3/2004 4:00 | 28.836 | 39.063 | 33.114 | 43.927 | 28.302 | 4.774 | 22.723 | 5.714 |
| 9/3/2004 8:00 | 28.843 | 39.085 | 33.122 | 43.95 | 28.311 | 4.758 | 22.729 | 5.684 |
| 9/3/2004 12:00 | 28.858 | 39.115 | 33.128 | 43.925 | 28.347 | 4.785 | 22.733 | 5.739 |
| 9/3/2004 16:00 | 28.858 | 39.106 | 33.118 | 43.925 | 28.353 | 4.791 | 22.737 | 5.812 |
| 9/3/2004 20:00 | 28.858 | 39.117 | 33.126 | 43.923 | 28.362 | 4.805 | 22.742 | 5.831 |
| 9/4/2004 0:00 | 28.885 | 39.162 | 33.152 | 43.964 | 28.386 | 4.779 | 22.75 | 5.788 |
| 9/4/2004 4:00 | 28.895 | 39.183 | 33.168 | 43.971 | 28.399 | 4.766 | 22.758 | 5.748 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 9/4/2004 8:00 | 28.903 | 39.213 | 33.19 | 43.955 | 28.414 | 4.772 | 22.766 | 5.716 |
| 9/4/2004 12:00 | 28.923 | 39.255 | 33.192 | 43.987 | 28.478 | 4.766 | 22.77 | 5.757 |
| 9/4/2004 16:00 | 28.915 | 39.217 | 33.166 | 43.978 | 28.478 | 4.779 | 22.768 | 5.827 |
| 9/4/2004 20:00 | 28.912 | 39.206 | 33.158 | 43.943 | 28.497 | 4.792 | 22.77 | 5.848 |
| 9/5/2004 0:00 | 28.92 | 39.232 | 33.174 | 43.983 | 28.476 | 4.786 | 22.777 | 5.806 |
| 9/5/2004 4:00 | 28.93 | 39.238 | 33.17 | 43.98 | 28.478 | 4.776 | 22.78 | 5.763 |
| 9/5/2004 8:00 | 28.93 | 39.234 | 33.164 | 43.948 | 28.482 | 4.792 | 22.78 | 5.73 |
| 9/5/2004 12:00 | 28.92 | 39.206 | 33.14 | 43.939 | 28.478 | 4.782 | 22.774 | 5.757 |
| 9/5/2004 16:00 | 28.905 | 39.159 | 33.118 | 43.948 | 28.468 | 4.871 | 22.772 | 5.825 |
| 9/5/2004 20:00 | 28.875 | 39.155 | 33.112 | 43.941 | 28.418 | 4.84 | 22.766 | 5.772 |
| 9/6/2004 0:00 | 28.91 | 39.23 | 33.176 | 43.96 | 28.41 | 4.817 | 22.785 | 5.757 |
| 9/6/2004 4:00 | 28.93 | 39.279 | 33.214 | 43.978 | 28.42 | 4.844 | 22.795 | 5.734 |
| 9/6/2004 8:00 | 28.954 | 39.353 | 33.269 | 44.008 | 28.453 | 4.823 | 22.81 | 5.723 |
| 9/6/2004 12:00 | 28.982 | 39.39 | 33.301 | 44.027 | 28.483 | 4.838 | 22.822 | 5.779 |
| 9/6/2004 16:00 | 28.982 | 39.388 | 33.305 | 44.036 | 28.502 | 4.86 | 22.828 | 5.849 |
| 9/6/2004 20:00 | 29.002 | 39.411 | 33.329 | 44.054 | 28.528 | 4.838 | 22.839 | 5.881 |
| 9/7/2004 0:00 | 29.017 | 39.454 | 33.359 | 44.071 | 28.552 | 4.846 | 22.849 | 5.832 |
| 9/7/2004 4:00 | 29.024 | 39.465 | 33.371 | 44.084 | 28.567 | 4.815 | 22.855 | 5.787 |
| 9/7/2004 8:00 | 29.044 | 39.503 | 33.407 | 44.103 | 28.592 | 4.835 | 22.866 | 5.762 |
| 9/7/2004 12:00 | 29.054 | 39.533 | 33.416 | 44.114 | 28.625 | 4.848 | 22.872 | 5.809 |
| 9/7/2004 16:00 | 29.041 | 39.484 | 33.386 | 44.117 | 28.618 | 4.872 | 22.868 | 5.873 |
| 9/7/2004 20:00 | 29.049 | 39.492 | 33.394 | 44.096 | 28.633 | 4.854 | 22.874 | 5.902 |
| 9/8/2004 0:00 | 29.052 | 39.511 | 33.412 | 44.103 | 28.644 | 4.843 | 22.88 | 5.854 |
| 9/8/2004 4:00 | 29.062 | 39.527 | 33.42 | 44.135 | 28.657 | 4.794 | 22.886 | 5.809 |
| 9/8/2004 8:00 | 29.084 | 39.55 | 33.444 | 44.151 | 28.676 | 4.804 | 22.893 | 5.773 |
| 9/8/2004 12:00 | 29.079 | 39.541 | 33.44 | 44.154 | 28.683 | 4.8 | 22.895 | 5.801 |
| 9/8/2004 16:00 | 29.066 | 39.499 | 33.401 | 44.117 | 28.676 | 4.821 | 22.888 | 5.871 |
| 9/8/2004 20:00 | 29.071 | 39.501 | 33.407 | 44.119 | 28.687 | 4.831 | 22.893 | 5.909 |
| 9/9/2004 0:00 | 29.084 | 39.537 | 33.432 | 44.158 | 28.704 | 4.806 | 22.903 | 5.862 |
| 9/9/2004 4:00 | 29.084 | 39.533 | 33.436 | 44.128 | 28.709 | 4.794 | 22.905 | 5.813 |
| 9/9/2004 8:00 | 29.091 | 39.556 | 33.452 | 44.158 | 28.722 | 4.808 | 22.909 | 5.782 |
| 9/9/2004 12:00 | 29.109 | 39.588 | 33.458 | 44.133 | 28.75 | 4.794 | 22.913 | 5.824 |
| 9/9/2004 16:00 | 29.091 | 39.546 | 33.426 | 44.154 | 28.739 | 4.839 | 22.909 | 5.901 |
| 9/9/2004 20:00 | 29.101 | 39.548 | 33.434 | 44.135 | 28.754 | 4.837 | 22.915 | 5.935 |
| 9/10/2004 0:00 | 29.111 | 39.58 | 33.46 | 44.172 | 28.769 | 4.82 | 22.922 | 5.892 |
| 9/10/2004 4:00 | 29.119 | 39.595 | 33.468 | 44.174 | 28.778 | 4.814 | 22.926 | 5.852 |
| 9/10/2004 8:00 | 29.139 | 39.639 | 33.494 | 44.154 | 28.797 | 4.824 | 22.934 | 5.824 |
| 9/10/2004 12:00 | 29.139 | 39.657 | 33.5 | 44.158 | 28.823 | 4.824 | 22.94 | 5.884 |
| 9/10/2004 16:00 | 29.134 | 39.625 | 33.478 | 44.158 | 28.816 | 4.833 | 22.938 | 5.952 |
| 9/10/2004 20:00 | 29.143 | 39.631 | 33.486 | 44.163 | 28.825 | 4.824 | 22.944 | 5.974 |
| 9/11/2004 0:00 | 29.161 | 39.671 | 33.512 | 44.172 | 28.842 | 4.822 | 22.951 | 5.935 |
| 9/11/2004 4:00 | 29.158 | 39.671 | 33.514 | 44.202 | 28.853 | 4.794 | 22.953 | 5.893 |
| 9/11/2004 8:00 | 29.176 | 39.703 | 33.536 | 44.213 | 28.868 | 4.814 | 22.961 | 5.861 |
| 9/11/2004 12:00 | 29.186 | 39.719 | 33.54 | 44.214 | 28.887 | 4.822 | 22.965 | 5.904 |
| 9/11/2004 16:00 | 29.178 | 39.697 | 33.518 | 44.179 | 28.913 | 4.847 | 22.965 | 5.978 |
| 9/11/2004 20:00 | 29.191 | 39.703 | 33.53 | 44.218 | 28.922 | 4.857 | 22.971 | 6.006 |
| 9/12/2004 0:00 | 29.196 | 39.733 | 33.547 | 44.198 | 28.952 | 4.841 | 22.976 | 5.955 |
| 9/12/2004 4:00 | 29.201 | 39.733 | 33.551 | 44.228 | 28.958 | 4.822 | 22.981 | 5.91 |
| 9/12/2004 8:00 | 29.208 | 39.755 | 33.563 | 44.23 | 28.969 | 4.834 | 22.982 | 5.878 |
| 9/12/2004 12:00 | 29.218 | 39.776 | 33.555 | 44.232 | 28.978 | 4.845 | 22.984 | 5.934 |
| 9/12/2004 16:00 | 29.201 | 39.733 | 33.522 | 44.218 | 28.963 | 4.851 | 22.979 | 6.002 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 9/12/2004 20:00 | 29.206 | 39.738 | 33.53 | 44.198 | 28.974 | 4.882 | 22.986 | 6.025 |
| 9/13/2004 0:00 | 29.218 | 39.763 | 33.546 | 44.235 | 28.989 | 4.832 | 22.992 | 5.989 |
| 9/13/2004 4:00 | 29.213 | 39.755 | 33.54 | 44.23 | 28.982 | 4.838 | 22.992 | 5.951 |
| 9/13/2004 8:00 | 29.215 | 39.755 | 33.54 | 44.223 | 28.986 | 4.853 | 22.994 | 5.923 |
| 9/13/2004 12:00 | 29.223 | 39.742 | 33.526 | 44.221 | 28.948 | 4.845 | 22.994 | 5.983 |
| 9/13/2004 16:00 | 29.208 | 39.712 | 33.508 | 44.207 | 28.93 | 4.88 | 22.992 | 6.04 |
| 9/13/2004 20:00 | 29.215 | 39.716 | 33.506 | 44.205 | 28.961 | 4.849 | 22.994 | 6.055 |
| 9/14/2004 0:00 | 29.232 | 39.761 | 33.532 | 44.214 | 29.01 | 4.853 | 23.006 | 6.027 |
| 9/14/2004 4:00 | 29.235 | 39.774 | 33.542 | 44.186 | 29.017 | 4.823 | 23.008 | 5.998 |
| 9/14/2004 8:00 | 29.245 | 39.808 | 33.566 | 44.225 | 29.029 | 4.846 | 23.015 | 5.968 |
| 9/14/2004 12:00 | 29.252 | 39.8 | 33.549 | 44.218 | 29.053 | 4.861 | 23.015 | 6.017 |
| 9/14/2004 16:00 | 29.238 | 39.759 | 33.524 | 44.177 | 29.036 | 4.861 | 23.012 | 6.07 |
| 9/14/2004 20:00 | 29.248 | 39.759 | 33.528 | 44.209 | 29.042 | 4.861 | 23.017 | 6.092 |
| 9/15/2004 0:00 | 29.26 | 39.819 | 33.55 | 44.221 | 29.047 | 4.856 | 23.025 | 6.055 |
| 9/15/2004 4:00 | 29.253 | 39.774 | 33.536 | 44.214 | 28.999 | 4.84 | 23.023 | 6.017 |
| 9/15/2004 8:00 | 29.282 | 39.868 | 33.605 | 44.209 | 29.017 | 4.848 | 23.039 | 5.996 |
| 9/15/2004 12:00 | 29.287 | 39.909 | 33.641 | 44.251 | 29.032 | 4.877 | 23.048 | 5.973 |
| 9/15/2004 16:00 | 29.31 | 39.915 | 33.641 | 44.251 | 29.085 | 4.9 | 23.054 | 6.043 |
| 9/15/2004 20:00 | 29.337 | 40.028 | 33.679 | 44.248 | 29.178 | 4.91 | 23.066 | 6.092 |
| 9/16/2004 0:00 | 29.362 | 40.086 | 33.725 | 44.297 | 29.2 | 4.898 | 23.08 | 6.054 |
| 9/16/2004 4:00 | 29.37 | 40.096 | 33.754 | 44.32 | 29.202 | 4.893 | 23.089 | 6.005 |
| 9/16/2004 8:00 | 29.382 | 40.099 | 33.771 | 44.336 | 29.204 | 4.883 | 23.097 | 5.964 |
| 9/16/2004 12:00 | 29.397 | 40.086 | 33.772 | 44.32 | 29.208 | 4.881 | 23.099 | 5.984 |
| 9/16/2004 16:00 | 29.374 | 40.03 | 33.736 | 44.308 | 29.195 | 4.912 | 23.095 | 6.054 |
| 9/16/2004 20:00 | 29.379 | 40.015 | 33.746 | 44.352 | 29.174 | 4.922 | 23.102 | 6.092 |
| 9/17/2004 0:00 | 29.392 | 40.03 | 33.768 | 44.362 | 29.15 | 4.912 | 23.108 | 6.043 |
| 9/17/2004 4:00 | 29.384 | 40.015 | 33.768 | 44.366 | 29.139 | 4.905 | 23.112 | 5.999 |
| 9/17/2004 8:00 | 29.399 | 40.041 | 33.792 | 44.371 | 29.144 | 4.908 | 23.118 | 5.963 |
| 9/17/2004 12:00 | 29.404 | 40.045 | 33.784 | 44.369 | 29.163 | 4.924 | 23.12 | 5.995 |
| 9/17/2004 16:00 | 29.392 | 39.998 | 33.752 | 44.362 | 29.152 | 4.934 | 23.114 | 6.054 |
| 9/17/2004 20:00 | 29.409 | 40.037 | 33.794 | 44.352 | 29.165 | 4.94 | 23.128 | 6.099 |
| 9/18/2004 0:00 | 29.402 | 40.049 | 33.798 | 44.385 | 29.176 | 4.926 | 23.132 | 6.065 |
| 9/18/2004 4:00 | 29.417 | 40.064 | 33.81 | 44.392 | 29.187 | 4.932 | 23.135 | 6.035 |
| 9/18/2004 8:00 | 29.424 | 40.107 | 33.828 | 44.401 | 29.197 | 4.921 | 23.141 | 6.016 |
| 9/18/2004 12:00 | 29.441 | 40.122 | 33.848 | 44.375 | 29.219 | 4.926 | 23.149 | 6.048 |
| 9/18/2004 16:00 | 29.436 | 40.086 | 33.814 | 44.403 | 29.215 | 4.936 | 23.145 | 6.116 |
| 9/18/2004 20:00 | 29.444 | 40.139 | 33.848 | 44.414 | 29.26 | 4.924 | 23.154 | 6.144 |
| 9/19/2004 0:00 | 29.464 | 40.184 | 33.878 | 44.394 | 29.271 | 4.944 | 23.164 | 6.103 |
| 9/19/2004 4:00 | 29.476 | 40.205 | 33.898 | 44.406 | 29.281 | 4.94 | 23.17 | 6.057 |
| 9/19/2004 8:00 | 29.484 | 40.237 | 33.925 | 44.419 | 29.29 | 4.922 | 23.18 | 6.029 |
| 9/19/2004 12:00 | 29.496 | 40.254 | 33.935 | 44.456 | 29.305 | 4.928 | 23.184 | 6.093 |
| 9/19/2004 16:00 | 29.486 | 40.22 | 33.9 | 44.433 | 29.355 | 4.952 | 23.182 | 6.155 |
| 9/19/2004 20:00 | 29.491 | 40.214 | 33.904 | 44.459 | 29.361 | 4.934 | 23.185 | 6.174 |
| 9/20/2004 0:00 | 29.493 | 40.229 | 33.919 | 44.463 | 29.376 | 4.934 | 23.191 | 6.14 |
| 9/20/2004 4:00 | 29.508 | 40.235 | 33.931 | 44.47 | 29.386 | 4.944 | 23.197 | 6.11 |
| 9/20/2004 8:00 | 29.516 | 40.254 | 33.955 | 44.445 | 29.395 | 4.924 | 23.203 | 6.089 |
| 9/20/2004 12:00 | 29.516 | 40.246 | 33.943 | 44.47 | 29.391 | 4.948 | 23.205 | 6.151 |
| 9/20/2004 16:00 | 29.501 | 40.22 | 33.91 | 44.466 | 29.384 | 4.965 | 23.199 | 6.197 |
| 9/20/2004 20:00 | 29.511 | 40.22 | 33.921 | 44.435 | 29.337 | 4.964 | 23.207 | 6.217 |
| 9/21/2004 0:00 | 29.523 | 40.257 | 33.957 | 44.482 | 29.342 | 4.942 | 23.214 | 6.18 |
| 9/21/2004 4:00 | 29.533 | 40.278 | 33.975 | 44.482 | 29.355 | 4.948 | 23.22 | 6.149 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 9/21/2004 8:00 | 29.541 | 40.303 | 34.001 | 44.489 | 29.37 | 4.954 | 23.226 | 6.123 |
| 9/21/2004 12:00 | 29.548 | 40.314 | 34.001 | 44.498 | 29.383 | 4.954 | 23.23 | 6.181 |
| 9/21/2004 16:00 | 29.553 | 40.306 | 34.003 | 44.473 | 29.387 | 4.973 | 23.234 | 6.236 |
| 9/21/2004 20:00 | 29.548 | 40.327 | 34.025 | 44.512 | 29.428 | 4.96 | 23.242 | 6.251 |
| 9/22/2004 0:00 | 29.58 | 40.374 | 34.057 | 44.523 | 29.471 | 4.977 | 23.25 | 6.21 |
| 9/22/2004 4:00 | 29.588 | 40.385 | 34.065 | 44.498 | 29.484 | 4.939 | 23.255 | 6.168 |
| 9/22/2004 8:00 | 29.603 | 40.415 | 34.093 | 44.542 | 29.512 | 4.968 | 23.263 | 6.136 |
| 9/22/2004 12:00 | 29.608 | 40.408 | 34.089 | 44.512 | 29.512 | 4.976 | 23.265 | 6.183 |
| 9/22/2004 16:00 | 29.585 | 40.359 | 34.043 | 44.516 | 29.501 | 5.008 | 23.261 | 6.242 |
| 9/22/2004 20:00 | 29.605 | 40.436 | 34.061 | 44.516 | 29.57 | 4.987 | 23.267 | 6.264 |
| 9/23/2004 0:00 | 29.603 | 40.425 | 34.063 | 44.546 | 29.563 | 4.991 | 23.269 | 6.215 |
| 9/23/2004 4:00 | 29.603 | 40.408 | 34.061 | 44.546 | 29.548 | 4.987 | 23.269 | 6.173 |
| 9/23/2004 8:00 | 29.608 | 40.419 | 34.079 | 44.551 | 29.548 | 4.966 | 23.274 | 6.143 |
| 9/23/2004 12:00 | 29.638 | 40.472 | 34.124 | 44.567 | 29.566 | 4.96 | 23.284 | 6.134 |
| 9/23/2004 16:00 | 29.63 | 40.451 | 34.106 | 44.567 | 29.559 | 4.974 | 23.284 | 6.207 |
| 9/23/2004 20:00 | 29.645 | 40.474 | 34.14 | 44.585 | 29.572 | 4.984 | 23.294 | 6.262 |
| 9/24/2004 0:00 | 29.652 | 40.502 | 34.164 | 44.595 | 29.591 | 4.974 | 23.302 | 6.217 |
| 9/24/2004 4:00 | 29.658 | 40.5 | 34.166 | 44.597 | 29.594 | 4.962 | 23.306 | 6.181 |
| 9/24/2004 8:00 | 29.677 | 40.545 | 34.21 | 44.609 | 29.613 | 4.941 | 23.313 | 6.162 |
| 9/24/2004 12:00 | 29.685 | 40.541 | 34.206 | 44.62 | 29.619 | 4.955 | 23.317 | 6.203 |
| 9/24/2004 16:00 | 29.675 | 40.494 | 34.178 | 44.618 | 29.606 | 4.994 | 23.315 | 6.275 |
| 9/24/2004 20:00 | 29.682 | 40.504 | 34.2 | 44.627 | 29.617 | 5.005 | 23.323 | 6.305 |
| 9/25/2004 0:00 | 29.7 | 40.551 | 34.24 | 44.643 | 29.638 | 4.98 | 23.333 | 6.267 |
| 9/25/2004 4:00 | 29.705 | 40.56 | 34.246 | 44.648 | 29.643 | 4.967 | 23.337 | 6.222 |
| 9/25/2004 8:00 | 29.72 | 40.598 | 34.28 | 44.634 | 29.664 | 4.99 | 23.346 | 6.192 |
| 9/25/2004 12:00 | 29.737 | 40.617 | 34.288 | 44.673 | 29.699 | 4.996 | 23.352 | 6.224 |
| 9/25/2004 16:00 | 29.72 | 40.583 | 34.264 | 44.674 | 29.684 | 5.005 | 23.352 | 6.299 |
| 9/25/2004 20:00 | 29.742 | 40.592 | 34.292 | 44.685 | 29.653 | 5.04 | 23.36 | 6.326 |
| 9/26/2004 0:00 | 29.742 | 40.643 | 34.299 | 44.696 | 29.63 | 5 | 23.364 | 6.273 |
| 9/26/2004 4:00 | 29.74 | 40.647 | 34.3 | 44.694 | 29.623 | 4.994 | 23.365 | 6.22 |
| 9/26/2004 8:00 | 29.747 | 40.664 | 34.319 | 44.697 | 29.634 | 4.961 | 23.369 | 6.184 |
| 9/26/2004 12:00 | 29.757 | 40.675 | 34.311 | 44.699 | 29.693 | 4.965 | 23.373 | 6.205 |
| 9/26/2004 16:00 | 29.74 | 40.63 | 34.278 | 44.692 | 29.686 | 5 | 23.367 | 6.284 |
| 9/26/2004 20:00 | 29.747 | 40.639 | 34.287 | 44.694 | 29.705 | 5.007 | 23.374 | 6.324 |
| 9/27/2004 0:00 | 29.754 | 40.652 | 34.307 | 44.699 | 29.714 | 4.983 | 23.379 | 6.28 |
| 9/27/2004 4:00 | 29.752 | 40.641 | 34.31 | 44.696 | 29.709 | 4.969 | 23.381 | 6.231 |
| 9/27/2004 8:00 | 29.757 | 40.645 | 34.333 | 44.706 | 29.681 | 4.955 | 23.385 | 6.199 |
| 9/27/2004 12:00 | 29.772 | 40.639 | 34.337 | 44.708 | 29.673 | 4.975 | 23.389 | 6.237 |
| 9/27/2004 16:00 | 29.754 | 40.59 | 34.304 | 44.664 | 29.651 | 4.99 | 23.385 | 6.312 |
| 9/27/2004 20:00 | 29.762 | 40.602 | 34.334 | 44.706 | 29.656 | 4.986 | 23.393 | 6.344 |
| 9/28/2004 0:00 | 29.784 | 40.662 | 34.377 | 44.722 | 29.68 | 4.981 | 23.402 | 6.314 |
| 9/28/2004 4:00 | 29.779 | 40.686 | 34.391 | 44.733 | 29.686 | 4.967 | 23.408 | 6.276 |
| 9/28/2004 8:00 | 29.804 | 40.733 | 34.431 | 44.724 | 29.716 | 4.988 | 23.418 | 6.255 |
| 9/28/2004 12:00 | 29.826 | 40.767 | 34.447 | 44.763 | 29.744 | 5 | 23.425 | 6.278 |
| 9/28/2004 16:00 | 29.804 | 40.726 | 34.411 | 44.763 | 29.731 | 5.039 | 23.424 | 6.336 |
| 9/28/2004 20:00 | 29.819 | 40.737 | 34.431 | 44.77 | 29.742 | 5.016 | 23.429 | 6.365 |
| 9/29/2004 0:00 | 29.826 | 40.754 | 34.439 | 44.747 | 29.75 | 4.997 | 23.433 | 6.304 |
| 9/29/2004 4:00 | 29.811 | 40.735 | 34.427 | 44.743 | 29.751 | 4.995 | 23.433 | 6.249 |
| 9/29/2004 8:00 | 29.819 | 40.752 | 34.445 | 44.773 | 29.75 | 4.975 | 23.437 | 6.208 |
| 9/29/2004 12:00 | 29.829 | 40.752 | 34.437 | 44.775 | 29.759 | 4.981 | 23.439 | 6.215 |
| 9/29/2004 16:00 | 29.794 | 40.694 | 34.385 | 44.756 | 29.74 | 5.02 | 23.424 | 6.264 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 9/29/2004 20:00 | 29.807 | 40.694 | 34.399 | 44.763 | 29.744 | 5.01 | 23.433 | 6.306 |
| 9/30/2004 0:00 | 29.816 | 40.716 | 34.413 | 44.733 | 29.755 | 4.999 | 23.437 | 6.272 |
| 9/30/2004 4:00 | 29.814 | 40.716 | 34.413 | 44.759 | 29.753 | 4.967 | 23.439 | 6.236 |
| 9/30/2004 8:00 | 29.816 | 40.733 | 34.425 | 44.763 | 29.757 | 4.985 | 23.443 | 6.21 |
| 9/30/2004 12:00 | 29.824 | 40.741 | 34.423 | 44.756 | 29.768 | 4.981 | 23.445 | 6.251 |
| 9/30/2004 16:00 | 29.809 | 40.701 | 34.385 | 44.74 | 29.761 | 5.024 | 23.439 | 6.323 |
| 9/30/2004 20:00 | 29.812 | 40.703 | 34.401 | 44.752 | 29.766 | 5.012 | 23.441 | 6.347 |
| 10/1/2004 0:00 | 29.822 | 40.722 | 34.411 | 44.71 | 29.774 | 5.01 | 23.445 | 6.317 |
| 10/1/2004 4:00 | 29.814 | 40.705 | 34.395 | 44.729 | 29.77 | 5.013 | 23.445 | 6.281 |
| 10/1/2004 8:00 | 29.817 | 40.733 | 34.419 | 44.731 | 29.774 | 5.007 | 23.449 | 6.26 |
| 10/1/2004 12:00 | 29.817 | 40.782 | 34.445 | 44.713 | 29.843 | 5.022 | 23.453 | 6.294 |
| 10/1/2004 16:00 | 29.866 | 40.863 | 34.506 | 44.75 | 29.841 | 5.022 | 23.47 | 6.341 |
| 10/1/2004 20:00 | 29.896 | 40.978 | 34.582 | 44.789 | 29.871 | 5.02 | 23.489 | 6.332 |
| 10/2/2004 0:00 | 29.923 | 41.051 | 34.63 | 44.819 | 29.899 | 5.013 | 23.503 | 6.298 |
| 10/2/2004 4:00 | 29.933 | 41.081 | 34.648 | 44.867 | 29.919 | 5.051 | 23.511 | 6.262 |
| 10/2/2004 8:00 | 29.941 | 41.102 | 34.667 | 44.886 | 29.923 | 5.026 | 23.518 | 6.234 |
| 10/2/2004 12:00 | 29.956 | 41.109 | 34.671 | 44.87 | 29.935 | 5.02 | 23.524 | 6.23 |
| 10/2/2004 16:00 | 29.938 | 41.053 | 34.628 | 44.865 | 29.925 | 5.025 | 23.518 | 6.249 |
| 10/2/2004 20:00 | 29.928 | 41.017 | 34.616 | 44.865 | 29.912 | 5.018 | 23.518 | 6.271 |
| 10/3/2004 0:00 | 29.928 | 41.019 | 34.622 | 44.893 | 29.916 | 5.027 | 23.522 | 6.247 |
| 10/3/2004 4:00 | 29.921 | 40.997 | 34.606 | 44.856 | 29.906 | 5.009 | 23.518 | 6.22 |
| 10/3/2004 8:00 | 29.906 | 40.985 | 34.604 | 44.849 | 29.901 | 4.996 | 23.52 | 6.201 |
| 10/3/2004 12:00 | 29.918 | 40.976 | 34.6 | 44.842 | 29.904 | 5.003 | 23.52 | 6.248 |
| 10/3/2004 16:00 | 29.911 | 40.94 | 34.572 | 44.828 | 29.899 | 5.029 | 23.515 | 6.318 |
| 10/3/2004 20:00 | 29.926 | 40.985 | 34.614 | 44.872 | 29.957 | 5.044 | 23.524 | 6.367 |
| 10/4/2004 0:00 | 29.946 | 41.057 | 34.667 | 44.895 | 29.994 | 5.007 | 23.536 | 6.35 |
| 10/4/2004 4:00 | 29.965 | 41.109 | 34.691 | 44.909 | 30.015 | 5.007 | 23.546 | 6.324 |
| 10/4/2004 8:00 | 29.98 | 41.179 | 34.741 | 44.907 | 30.041 | 5.013 | 23.557 | 6.309 |
| 10/4/2004 12:00 | 30 | 41.217 | 34.755 | 44.918 | 30.067 | 5.044 | 23.567 | 6.316 |
| 10/4/2004 16:00 | 29.993 | 41.192 | 34.731 | 44.951 | 30.067 | 5.045 | 23.567 | 6.358 |
| 10/4/2004 20:00 | 29.995 | 41.179 | 34.741 | 44.934 | 30.067 | 5.037 | 23.573 | 6.382 |
| 10/5/2004 0:00 | 30.003 | 41.16 | 34.745 | 44.934 | 30.056 | 5.034 | 23.575 | 6.335 |
| 10/5/2004 4:00 | 30.003 | 41.123 | 34.757 | 44.974 | 30.009 | 5.013 | 23.58 | 6.299 |
| 10/5/2004 8:00 | 30.003 | 41.087 | 34.769 | 44.983 | 29.961 | 5.015 | 23.582 | 6.269 |
| 10/5/2004 12:00 | 29.995 | 41.034 | 34.761 | 44.946 | 29.953 | 5.013 | 23.584 | 6.276 |
| 10/5/2004 16:00 | 29.99 | 40.961 | 34.723 | 44.962 | 29.988 | 5.045 | 23.577 | 6.338 |
| 10/5/2004 20:00 | 29.973 | 40.955 | 34.735 | 44.939 | 30.007 | 5.054 | 23.577 | 6.376 |
| 10/6/2004 0:00 | 29.995 | 40.976 | 34.749 | 44.967 | 30.011 | 5.043 | 23.586 | 6.348 |
| 10/6/2004 4:00 | 30 | 40.991 | 34.757 | 44.969 | 30.022 | 5.041 | 23.588 | 6.325 |
| 10/6/2004 8:00 | 30.003 | 41.01 | 34.767 | 44.939 | 30.125 | 5.031 | 23.592 | 6.304 |
| 10/6/2004 12:00 | 30.023 | 41.044 | 34.789 | 44.978 | 30.043 | 5.031 | 23.598 | 6.363 |
| 10/6/2004 16:00 | 30.003 | 41.004 | 34.747 | 44.939 | 30.033 | 5.048 | 23.592 | 6.412 |
| 10/6/2004 20:00 | 30.005 | 40.997 | 34.747 | 44.969 | 30.033 | 5.048 | 23.596 | 6.419 |
| 10/7/2004 0:00 | 30.005 | 41.012 | 34.759 | 44.941 | 30.041 | 5.043 | 23.598 | 6.391 |
| 10/7/2004 4:00 | 30.008 | 41.008 | 34.753 | 44.962 | 30.043 | 5.049 | 23.598 | 6.364 |
| 10/7/2004 8:00 | 30.005 | 41.01 | 34.757 | 44.955 | 30.046 | 5.039 | 23.598 | 6.338 |
| 10/7/2004 12:00 | 30.013 | 41.025 | 34.771 | 44.962 | 30.052 | 5.039 | 23.602 | 6.31 |
| 10/7/2004 16:00 | 30.005 | 40.997 | 34.745 | 44.92 | 30.048 | 5.047 | 23.6 | 6.281 |
| 10/7/2004 20:00 | 30.008 | 41.01 | 34.761 | 44.955 | 30.063 | 5.028 | 23.602 | 6.268 |
| 10/8/2004 0:00 | 30.01 | 41.032 | 34.777 | 44.932 | 30.071 | 5.037 | 23.608 | 6.242 |
| 10/8/2004 4:00 | 30.02 | 41.036 | 34.779 | 44.955 | 30.075 | 5.006 | 23.609 | 6.215 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 10/8/2004 8:00 | 30.023 | 41.072 | 34.805 | 44.976 | 30.06 | 5.012 | 23.615 | 6.198 |
| 10/8/2004 12:00 | 30.04 | 41.104 | 34.825 | 44.983 | 30.045 | 5.028 | 23.621 | 6.211 |
| 10/8/2004 16:00 | 30.045 | 41.104 | 34.823 | 44.992 | 30.045 | 5.041 | 23.623 | 6.277 |
| 10/8/2004 20:00 | 30.062 | 41.151 | 34.856 | 44.978 | 30.071 | 5.01 | 23.633 | 6.336 |
| 10/9/2004 0:00 | 30.07 | 41.194 | 34.88 | 44.997 | 30.084 | 5.042 | 23.642 | 6.328 |
| 10/9/2004 4:00 | 30.07 | 41.2 | 34.88 | 45.031 | 30.091 | 5.03 | 23.644 | 6.298 |
| 10/9/2004 8:00 | 30.057 | 41.223 | 34.896 | 45.043 | 30.102 | 5.047 | 23.646 | 6.27 |
| 10/9/2004 12:00 | 30.09 | 41.236 | 34.902 | 45.048 | 30.112 | 5.034 | 23.654 | 6.279 |
| 10/9/2004 16:00 | 30.072 | 41.185 | 34.862 | 45.041 | 30.093 | 5.043 | 23.648 | 6.336 |
| 10/9/2004 20:00 | 30.072 | 41.198 | 34.882 | 45.015 | 30.104 | 5.049 | 23.656 | 6.379 |
| 10/10/2004 0:00 | 30.082 | 41.219 | 34.898 | 45.054 | 30.112 | 5.061 | 23.66 | 6.341 |
| 10/10/2004 4:00 | 30.082 | 41.217 | 34.898 | 45.022 | 30.112 | 5.057 | 23.662 | 6.303 |
| 10/10/2004 8:00 | 30.095 | 41.241 | 34.918 | 45.027 | 30.125 | 5.049 | 23.666 | 6.277 |
| 10/10/2004 12:00 | 30.087 | 41.26 | 34.922 | 45.031 | 30.168 | 5.044 | 23.669 | 6.292 |
| 10/10/2004 16:00 | 30.092 | 41.232 | 34.904 | 45.036 | 30.295 | 5.049 | 23.668 | 6.343 |
| 10/10/2004 20:00 | 30.104 | 41.26 | 34.932 | 45.071 | 30.198 | 5.038 | 23.675 | 6.379 |
| 10/11/2004 0:00 | 30.105 | 41.281 | 34.938 | 45.073 | 30.207 | 5.046 | 23.677 | 6.358 |
| 10/11/2004 4:00 | 30.107 | 41.279 | 34.938 | 45.052 | 30.209 | 5.05 | 23.681 | 6.339 |
| 10/11/2004 8:00 | 30.115 | 41.292 | 34.95 | 45.08 | 30.222 | 5.034 | 23.685 | 6.326 |
| 10/11/2004 12:00 | 30.114 | 41.311 | 34.956 | 45.052 | 30.231 | 5.044 | 23.689 | 6.343 |
| 10/11/2004 16:00 | 30.112 | 41.275 | 34.934 | 45.045 | 30.222 | 5.065 | 23.685 | 6.388 |
| 10/11/2004 20:00 | 30.117 | 41.283 | 34.946 | 45.082 | 30.229 | 5.052 | 23.691 | 6.398 |
| 10/12/2004 0:00 | 30.119 | 41.309 | 34.958 | 45.089 | 30.235 | 5.048 | 23.693 | 6.375 |
| 10/12/2004 4:00 | 30.107 | 41.279 | 34.93 | 45.073 | 30.222 | 5.036 | 23.691 | 6.32 |
| 10/12/2004 8:00 | 30.104 | 41.275 | 34.932 | 45.066 | 30.194 | 5.038 | 23.691 | 6.29 |
| 10/12/2004 12:00 | 30.109 | 41.27 | 34.932 | 45.029 | 30.177 | 5.039 | 23.691 | 6.28 |
| 10/12/2004 16:00 | 30.107 | 41.241 | 34.914 | 45.048 | 30.162 | 5.054 | 23.687 | 6.322 |
| 10/12/2004 20:00 | 30.109 | 41.262 | 34.932 | 45.024 | 30.171 | 5.054 | 23.693 | 6.337 |
| 10/13/2004 0:00 | 30.117 | 41.283 | 34.944 | 45.054 | 30.177 | 5.052 | 23.695 | 6.312 |
| 10/13/2004 4:00 | 30.11 | 41.285 | 34.944 | 45.048 | 30.173 | 5.035 | 23.695 | 6.284 |
| 10/13/2004 8:00 | 30.117 | 41.317 | 34.972 | 45.031 | 30.181 | 5.031 | 23.7 | 6.269 |
| 10/13/2004 12:00 | 30.137 | 41.36 | 34.994 | 45.075 | 30.203 | 5.035 | 23.71 | 6.297 |
| 10/13/2004 16:00 | 30.145 | 41.378 | 35.006 | 45.087 | 30.211 | 5.054 | 23.714 | 6.331 |
| 10/13/2004 20:00 | 30.154 | 41.418 | 35.028 | 45.105 | 30.278 | 5.044 | 23.722 | 6.337 |
| 10/14/2004 0:00 | 30.159 | 41.431 | 35.028 | 45.112 | 30.293 | 5.05 | 23.724 | 6.314 |
| 10/14/2004 4:00 | 30.149 | 41.401 | 35.004 | 45.103 | 30.287 | 5.027 | 23.722 | 6.284 |
| 10/14/2004 8:00 | 30.142 | 41.394 | 35.002 | 45.096 | 30.285 | 5.035 | 23.722 | 6.257 |
| 10/14/2004 12:00 | 30.147 | 41.375 | 34.988 | 45.091 | 30.287 | 5.039 | 23.722 | 6.246 |
| 10/14/2004 16:00 | 30.127 | 41.324 | 34.958 | 45.075 | 30.276 | 5.039 | 23.712 | 6.263 |
| 10/14/2004 20:00 | 30.127 | 41.32 | 34.968 | 45.041 | 30.237 | 5.035 | 23.712 | 6.28 |
| 10/15/2004 0:00 | 30.134 | 41.326 | 34.97 | 45.068 | 30.226 | 5.037 | 23.716 | 6.268 |
| 10/15/2004 4:00 | 30.132 | 41.332 | 34.976 | 45.064 | 30.22 | 5.051 | 23.718 | 6.249 |
| 10/15/2004 8:00 | 30.135 | 41.377 | 35.012 | 45.075 | 30.226 | 5.043 | 23.726 | 6.236 |
| 10/15/2004 12:00 | 30.159 | 41.42 | 35.036 | 45.091 | 30.246 | 5.043 | 23.733 | 6.255 |
| 10/15/2004 16:00 | 30.167 | 41.437 | 35.037 | 45.101 | 30.252 | 5.08 | 23.737 | 6.283 |
| 10/15/2004 20:00 | 30.182 | 41.49 | 35.081 | 45.124 | 30.27 | 5.064 | 23.747 | 6.3 |
| 10/16/2004 0:00 | 30.197 | 41.529 | 35.097 | 45.142 | 30.293 | 5.062 | 23.755 | 6.287 |
| 10/16/2004 4:00 | 30.202 | 41.548 | 35.113 | 45.124 | 30.302 | 5.051 | 23.759 | 6.27 |
| 10/16/2004 8:00 | 30.207 | 41.569 | 35.131 | 45.138 | 30.306 | 5.064 | 23.764 | 6.251 |
| 10/16/2004 12:00 | 30.222 | 41.595 | 35.139 | 45.149 | 30.317 | 5.061 | 23.768 | 6.253 |
| 10/16/2004 16:00 | 30.212 | 41.559 | 35.111 | 45.177 | 30.313 | 5.074 | 23.766 | 6.279 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 10/16/2004 20:00 | 30.217 | 41.563 | 35.125 | 45.189 | 30.321 | 5.059 | 23.772 | 6.291 |
| 10/17/2004 0:00 | 30.222 | 41.582 | 35.141 | 45.193 | 30.332 | 5.059 | 23.776 | 6.279 |
| 10/17/2004 4:00 | 30.222 | 41.582 | 35.139 | 45.165 | 30.33 | 5.049 | 23.778 | 6.253 |
| 10/17/2004 8:00 | 30.216 | 41.587 | 35.141 | 45.193 | 30.326 | 5.053 | 23.78 | 6.23 |
| 10/17/2004 12:00 | 30.219 | 41.572 | 35.127 | 45.191 | 30.33 | 5.057 | 23.78 | 6.228 |
| 10/17/2004 16:00 | 30.202 | 41.512 | 35.081 | 45.14 | 30.317 | 5.084 | 23.768 | 6.258 |
| 10/17/2004 20:00 | 30.204 | 41.514 | 35.099 | 45.168 | 30.315 | 5.1 | 23.772 | 6.283 |
| 10/18/2004 0:00 | 30.202 | 41.514 | 35.089 | 45.163 | 30.317 | 5.074 | 23.772 | 6.266 |
| 10/18/2004 4:00 | 30.189 | 41.48 | 35.061 | 45.142 | 30.308 | 5.067 | 23.766 | 6.243 |
| 10/18/2004 8:00 | 30.199 | 41.505 | 35.097 | 45.152 | 30.313 | 5.086 | 23.774 | 6.243 |
| 10/18/2004 12:00 | 30.204 | 41.531 | 35.117 | 45.158 | 30.321 | 5.069 | 23.78 | 6.245 |
| 10/18/2004 16:00 | 30.212 | 41.563 | 35.139 | 45.14 | 30.332 | 5.073 | 23.786 | 6.249 |
| 10/18/2004 20:00 | 30.239 | 41.627 | 35.187 | 45.175 | 30.351 | 5.083 | 23.795 | 6.247 |
| 10/19/2004 0:00 | 30.241 | 41.659 | 35.197 | 45.189 | 30.366 | 5.061 | 23.801 | 6.226 |
| 10/19/2004 4:00 | 30.256 | 41.676 | 35.207 | 45.225 | 30.377 | 5.059 | 23.807 | 6.209 |
| 10/19/2004 8:00 | 30.269 | 41.727 | 35.252 | 45.221 | 30.394 | 5.085 | 23.817 | 6.205 |
| 10/19/2004 12:00 | 30.279 | 41.742 | 35.252 | 45.235 | 30.401 | 5.069 | 23.82 | 6.19 |
| 10/19/2004 16:00 | 30.271 | 41.727 | 35.244 | 45.269 | 30.407 | 5.071 | 23.822 | 6.211 |
| 10/19/2004 20:00 | 30.291 | 41.77 | 35.278 | 45.262 | 30.433 | 5.066 | 23.83 | 6.228 |
| 10/20/2004 0:00 | 30.294 | 41.792 | 35.282 | 45.297 | 30.433 | 5.071 | 23.836 | 6.201 |
| 10/20/2004 4:00 | 30.303 | 41.789 | 35.282 | 45.309 | 30.44 | 5.064 | 23.84 | 6.186 |
| 10/20/2004 8:00 | 30.301 | 41.806 | 35.3 | 45.29 | 30.444 | 5.066 | 23.844 | 6.177 |
| 10/20/2004 12:00 | 30.306 | 41.821 | 35.312 | 45.297 | 30.45 | 5.058 | 23.848 | 6.165 |
| 10/20/2004 16:00 | 30.298 | 41.787 | 35.29 | 45.323 | 30.446 | 5.069 | 23.846 | 6.156 |
| 10/20/2004 20:00 | 30.309 | 41.794 | 35.306 | 45.329 | 30.448 | 5.058 | 23.85 | 6.152 |
| 10/21/2004 0:00 | 30.311 | 41.811 | 35.314 | 45.334 | 30.455 | 5.062 | 23.853 | 6.137 |
| 10/21/2004 4:00 | 30.303 | 41.794 | 35.298 | 45.329 | 30.453 | 5.056 | 23.851 | 6.118 |
| 10/21/2004 8:00 | 30.311 | 41.794 | 35.302 | 45.325 | 30.459 | 5.056 | 23.851 | 6.107 |
| 10/21/2004 12:00 | 30.303 | 41.781 | 35.294 | 45.323 | 30.45 | 5.049 | 23.852 | 6.093 |
| 10/21/2004 16:00 | 30.294 | 41.755 | 35.272 | 45.306 | 30.437 | 5.051 | 23.846 | 6.076 |
| 10/21/2004 20:00 | 30.298 | 41.764 | 35.29 | 45.316 | 30.448 | 5.064 | 23.85 | 6.071 |
| 10/22/2004 0:00 | 30.286 | 41.77 | 35.288 | 45.281 | 30.444 | 5.064 | 23.851 | 6.059 |
| 10/22/2004 4:00 | 30.291 | 41.748 | 35.274 | 45.299 | 30.435 | 5.051 | 23.846 | 6.042 |
| 10/22/2004 8:00 | 30.294 | 41.751 | 35.282 | 45.262 | 30.44 | 5.054 | 23.846 | 6.042 |
| 10/22/2004 12:00 | 30.284 | 41.747 | 35.268 | 45.256 | 30.433 | 5.049 | 23.846 | 6.038 |
| 10/22/2004 16:00 | 30.272 | 41.71 | 35.248 | 45.237 | 30.42 | 5.07 | 23.838 | 6.057 |
| 10/22/2004 20:00 | 30.279 | 41.723 | 35.266 | 45.272 | 30.429 | 5.068 | 23.844 | 6.074 |
| 10/23/2004 0:00 | 30.281 | 41.715 | 35.256 | 45.267 | 30.425 | 5.039 | 23.842 | 6.065 |
| 10/23/2004 4:00 | 30.289 | 41.749 | 35.294 | 45.274 | 30.435 | 5.033 | 23.85 | 6.069 |
| 10/23/2004 8:00 | 30.267 | 41.823 | 35.352 | 45.272 | 30.461 | 5.039 | 23.851 | 6.082 |
| 10/23/2004 12:00 | 30.334 | 41.868 | 35.373 | 45.295 | 30.483 | 5.049 | 23.871 | 6.091 |
| 10/23/2004 16:00 | 30.331 | 41.873 | 35.374 | 45.343 | 30.487 | 5.076 | 23.873 | 6.112 |
| 10/23/2004 20:00 | 30.346 | 41.898 | 35.392 | 45.329 | 30.506 | 5.066 | 23.881 | 6.127 |
| 10/24/2004 0:00 | 30.344 | 41.918 | 35.402 | 45.369 | 30.515 | 5.066 | 23.886 | 6.116 |
| 10/24/2004 4:00 | 30.341 | 41.913 | 35.402 | 45.376 | 30.515 | 5.059 | 23.889 | 6.104 |
| 10/24/2004 8:00 | 30.356 | 41.924 | 35.412 | 45.38 | 30.521 | 5.065 | 23.892 | 6.097 |
| 10/24/2004 12:00 | 30.358 | 41.922 | 35.396 | 45.383 | 30.521 | 5.074 | 23.892 | 6.099 |
| 10/24/2004 16:00 | 30.353 | 41.892 | 35.378 | 45.376 | 30.565 | 5.09 | 23.89 | 6.127 |
| 10/24/2004 20:00 | 30.358 | 41.93 | 35.419 | 45.394 | 30.59 | 5.086 | 23.898 | 6.151 |
| 10/25/2004 0:00 | 30.376 | 41.986 | 35.459 | 45.41 | 30.612 | 5.082 | 23.908 | 6.153 |
| 10/25/2004 4:00 | 30.386 | 42.022 | 35.477 | 45.394 | 30.623 | 5.077 | 23.914 | 6.142 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 10/25/2004 8:00 | 30.401 | 42.054 | 35.501 | 45.447 | 30.642 | 5.065 | 23.924 | 6.138 |
| 10/25/2004 12:00 | 30.411 | 42.058 | 35.507 | 45.417 | 30.651 | 5.071 | 23.927 | 6.132 |
| 10/25/2004 16:00 | 30.4 | 41.992 | 35.473 | 45.445 | 30.612 | 5.09 | 23.925 | 6.136 |
| 10/25/2004 20:00 | 30.405 | 41.969 | 35.495 | 45.461 | 30.593 | 5.092 | 23.931 | 6.144 |
| 10/26/2004 0:00 | 30.407 | 41.956 | 35.497 | 45.431 | 30.58 | 5.098 | 23.933 | 6.134 |
| 10/26/2004 4:00 | 30.393 | 41.928 | 35.475 | 45.45 | 30.56 | 5.079 | 23.931 | 6.115 |
| 10/26/2004 8:00 | 30.385 | 41.924 | 35.487 | 45.42 | 30.547 | 5.059 | 23.935 | 6.102 |
| 10/26/2004 12:00 | 30.39 | 41.924 | 35.499 | 45.452 | 30.545 | 5.059 | 23.937 | 6.094 |
| 10/26/2004 16:00 | 30.39 | 41.922 | 35.505 | 45.424 | 30.534 | 5.084 | 23.939 | 6.083 |
| 10/26/2004 20:00 | 30.407 | 41.962 | 35.545 | 45.475 | 30.549 | 5.082 | 23.947 | 6.091 |
| 10/27/2004 0:00 | 30.417 | 41.997 | 35.562 | 45.459 | 30.567 | 5.079 | 23.954 | 6.087 |
| 10/27/2004 4:00 | 30.417 | 42.003 | 35.569 | 45.466 | 30.562 | 5.091 | 23.958 | 6.074 |
| 10/27/2004 8:00 | 30.425 | 42.022 | 35.591 | 45.484 | 30.573 | 5.079 | 23.964 | 6.072 |
| 10/27/2004 12:00 | 30.42 | 42.041 | 35.602 | 45.521 | 30.586 | 5.085 | 23.972 | 6.066 |
| 10/27/2004 16:00 | 30.432 | 41.999 | 35.574 | 45.519 | 30.575 | 5.085 | 23.966 | 6.049 |
| 10/27/2004 20:00 | 30.425 | 41.988 | 35.579 | 45.521 | 30.573 | 5.083 | 23.968 | 6.045 |
| 10/28/2004 0:00 | 30.432 | 41.988 | 35.579 | 45.521 | 30.58 | 5.091 | 23.97 | 6.036 |
| 10/28/2004 4:00 | 30.405 | 41.962 | 35.575 | 45.484 | 30.549 | 5.075 | 23.962 | 6.017 |
| 10/28/2004 8:00 | 30.395 | 41.928 | 35.557 | 45.503 | 30.528 | 5.056 | 23.956 | 6.007 |
| 10/28/2004 12:00 | 30.395 | 41.909 | 35.547 | 45.489 | 30.519 | 5.06 | 23.954 | 5.994 |
| 10/28/2004 16:00 | 30.373 | 41.851 | 35.511 | 45.468 | 30.498 | 5.058 | 23.945 | 5.986 |
| 10/28/2004 20:00 | 30.38 | 41.849 | 35.531 | 45.463 | 30.496 | 5.065 | 23.947 | 5.996 |
| 10/29/2004 0:00 | 30.387 | 41.858 | 35.533 | 45.433 | 30.493 | 5.064 | 23.949 | 5.986 |
| 10/29/2004 4:00 | 30.375 | 41.834 | 35.521 | 45.424 | 30.483 | 5.054 | 23.947 | 5.973 |
| 10/29/2004 8:00 | 30.373 | 41.819 | 35.517 | 45.44 | 30.47 | 5.048 | 23.941 | 5.966 |
| 10/29/2004 12:00 | 30.368 | 41.798 | 35.499 | 45.396 | 30.465 | 5.046 | 23.939 | 5.962 |
| 10/29/2004 16:00 | 30.358 | 41.759 | 35.479 | 45.417 | 30.455 | 5.054 | 23.933 | 5.964 |
| 10/29/2004 20:00 | 30.373 | 41.824 | 35.552 | 45.438 | 30.463 | 5.045 | 23.947 | 5.986 |
| 10/30/2004 0:00 | 30.383 | 41.853 | 35.563 | 45.45 | 30.478 | 5.056 | 23.954 | 5.984 |
| 10/30/2004 4:00 | 30.388 | 41.874 | 35.58 | 45.459 | 30.483 | 5.056 | 23.96 | 5.979 |
| 10/30/2004 8:00 | 30.403 | 41.928 | 35.626 | 45.459 | 30.491 | 5.062 | 23.972 | 5.984 |
| 10/30/2004 12:00 | 30.418 | 41.971 | 35.652 | 45.484 | 30.513 | 5.068 | 23.982 | 5.988 |
| 10/30/2004 16:00 | 30.425 | 41.973 | 35.638 | 45.521 | 30.517 | 5.08 | 23.984 | 5.984 |
| 10/30/2004 20:00 | 30.433 | 41.994 | 35.664 | 45.544 | 30.528 | 5.082 | 23.989 | 5.992 |
| 10/31/2004 0:00 | 30.425 | 42.003 | 35.662 | 45.549 | 30.537 | 5.078 | 23.987 | 5.981 |
| 10/31/2004 4:00 | 30.437 | 41.994 | 35.656 | 45.521 | 30.534 | 5.064 | 23.993 | 5.971 |
| 10/31/2004 8:00 | 30.435 | 42.012 | 35.674 | 45.558 | 30.539 | 5.049 | 23.997 | 5.969 |
| 10/31/2004 12:00 | 30.442 | 42.015 | 35.676 | 45.533 | 30.552 | 5.066 | 23.999 | 5.963 |
| 10/31/2004 16:00 | 30.435 | 41.96 | 35.634 | 45.556 | 30.539 | 5.062 | 23.995 | 5.954 |
| 10/31/2004 20:00 | 30.423 | 41.956 | 35.648 | 45.553 | 30.537 | 5.075 | 23.993 | 5.956 |
| 11/1/2004 0:00 | 30.438 | 41.969 | 35.658 | 45.565 | 30.543 | 5.084 | 24.001 | 5.954 |
| 11/1/2004 4:00 | 30.433 | 41.954 | 35.65 | 45.556 | 30.539 | 5.065 | 23.997 | 5.941 |
| 11/1/2004 8:00 | 30.42 | 41.962 | 35.662 | 45.551 | 30.504 | 5.061 | 23.995 | 5.931 |
| 11/1/2004 12:00 | 30.42 | 41.973 | 35.684 | 45.565 | 30.506 | 5.063 | 23.993 | 5.937 |
| 11/1/2004 16:00 | 30.403 | 41.979 | 35.694 | 45.569 | 30.502 | 5.061 | 23.987 | 5.933 |
| 11/1/2004 20:00 | 30.435 | 42.047 | 35.759 | 45.602 | 30.521 | 5.057 | 24.003 | 5.95 |
| 11/2/2004 0:00 | 30.46 | 42.094 | 35.785 | 45.63 | 30.543 | 5.073 | 24.022 | 5.956 |
| 11/2/2004 4:00 | 30.475 | 42.118 | 35.797 | 45.65 | 30.556 | 5.075 | 24.03 | 5.956 |
| 11/2/2004 8:00 | 30.485 | 42.14 | 35.813 | 45.673 | 30.562 | 5.067 | 24.036 | 5.956 |
| 11/2/2004 12:00 | 30.433 | 42.159 | 35.821 | 45.662 | 30.569 | 5.078 | 24.03 | 5.954 |
| 11/2/2004 16:00 | 30.495 | 42.14 | 35.815 | 45.697 | 30.571 | 5.082 | 24.045 | 5.946 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 11/2/2004 20:00 | 30.5 | 42.152 | 35.831 | 45.681 | 30.582 | 5.082 | 24.049 | 5.948 |
| 11/3/2004 0:00 | 30.487 | 42.135 | 35.819 | 45.685 | 30.582 | 5.088 | 24.051 | 5.939 |
| 11/3/2004 4:00 | 30.487 | 42.11 | 35.807 | 45.708 | 30.577 | 5.069 | 24.049 | 5.931 |
| 11/3/2004 8:00 | 30.485 | 42.094 | 35.805 | 45.699 | 30.562 | 5.063 | 24.047 | 5.925 |
| 11/3/2004 12:00 | 30.473 | 42.065 | 35.779 | 45.683 | 30.552 | 5.081 | 24.045 | 5.91 |
| 11/3/2004 16:00 | 30.458 | 41.996 | 35.74 | 45.655 | 30.53 | 5.073 | 24.034 | 5.893 |
| 11/3/2004 20:00 | 30.455 | 42.009 | 35.766 | 45.655 | 30.694 | 5.071 | 24.036 | 5.897 |
| 11/4/2004 0:00 | 30.43 | 41.992 | 35.757 | 45.646 | 30.504 | 5.063 | 24.005 | 5.886 |
| 11/4/2004 4:00 | 30.425 | 41.988 | 35.775 | 45.648 | 30.489 | 5.059 | 24.005 | 5.891 |
| 11/4/2004 8:00 | 30.435 | 42.022 | 35.821 | 45.637 | 30.489 | 5.071 | 24.018 | 5.904 |
| 11/4/2004 12:00 | 30.46 | 42.094 | 35.875 | 45.673 | 30.504 | 5.067 | 24.038 | 5.921 |
| 11/4/2004 16:00 | 30.471 | 42.101 | 35.873 | 45.72 | 30.511 | 5.081 | 24.047 | 5.914 |
| 11/4/2004 20:00 | 30.475 | 42.109 | 35.885 | 45.734 | 30.515 | 5.064 | 24.053 | 5.918 |
| 11/5/2004 0:00 | 30.475 | 42.103 | 35.879 | 45.713 | 30.515 | 5.058 | 24.057 | 5.912 |
| 11/5/2004 4:00 | 30.47 | 42.073 | 35.861 | 45.706 | 30.506 | 5.07 | 24.055 | 5.897 |
| 11/5/2004 8:00 | 30.463 | 42.041 | 35.847 | 45.699 | 30.5 | 5.064 | 24.055 | 5.885 |
| 11/5/2004 12:00 | 30.451 | 42.007 | 35.823 | 45.68 | 30.485 | 5.062 | 24.049 | 5.876 |
| 11/5/2004 16:00 | 30.438 | 41.939 | 35.788 | 45.653 | 30.459 | 5.07 | 24.04 | 5.863 |
| 11/5/2004 20:00 | 30.436 | 41.939 | 35.809 | 45.683 | 30.459 | 5.058 | 24.04 | 5.868 |
| 11/6/2004 0:00 | 30.418 | 41.936 | 35.807 | 45.676 | 30.455 | 5.062 | 24.036 | 5.863 |
| 11/6/2004 4:00 | 30.423 | 41.947 | 35.819 | 45.678 | 30.457 | 5.054 | 24.042 | 5.865 |
| 11/6/2004 8:00 | 30.428 | 41.947 | 35.821 | 45.673 | 30.459 | 5.046 | 24.044 | 5.859 |
| 11/6/2004 12:00 | 30.436 | 41.958 | 35.831 | 45.643 | 30.461 | 5.058 | 24.047 | 5.857 |
| 11/6/2004 16:00 | 30.423 | 41.92 | 35.803 | 45.664 | 30.455 | 5.047 | 24.042 | 5.849 |
| 11/6/2004 20:00 | 30.433 | 41.953 | 35.843 | 45.653 | 30.465 | 5.045 | 24.049 | 5.866 |
| 11/7/2004 0:00 | 30.44 | 41.992 | 35.871 | 45.694 | 30.476 | 5.039 | 24.057 | 5.872 |
| 11/7/2004 4:00 | 30.453 | 42.029 | 35.897 | 45.687 | 30.491 | 5.037 | 24.065 | 5.874 |
| 11/7/2004 8:00 | 30.475 | 42.097 | 35.94 | 45.747 | 30.515 | 5.047 | 24.075 | 5.889 |
| 11/7/2004 12:00 | 30.497 | 42.155 | 35.968 | 45.778 | 30.541 | 5.058 | 24.084 | 5.897 |
| 11/7/2004 16:00 | 30.495 | 42.137 | 35.953 | 45.789 | 30.552 | 5.053 | 24.086 | 5.885 |
| 11/7/2004 20:00 | 30.502 | 42.159 | 35.97 | 45.805 | 30.562 | 5.076 | 24.092 | 5.893 |
| 11/8/2004 0:00 | 30.495 | 42.184 | 35.986 | 45.826 | 30.573 | 5.068 | 24.092 | 5.898 |
| 11/8/2004 4:00 | 30.51 | 42.186 | 35.982 | 45.831 | 30.576 | 5.055 | 24.1 | 5.889 |
| 11/8/2004 8:00 | 30.522 | 42.204 | 36.002 | 45.842 | 30.591 | 5.076 | 24.106 | 5.893 |
| 11/8/2004 12:00 | 30.515 | 42.223 | 35.988 | 45.812 | 30.584 | 5.069 | 24.107 | 5.881 |
| 11/8/2004 16:00 | 30.492 | 42.17 | 35.947 | 45.828 | 30.563 | 5.063 | 24.1 | 5.862 |
| 11/8/2004 20:00 | 30.51 | 42.17 | 35.958 | 45.824 | 30.569 | 5.051 | 24.102 | 5.866 |
| 11/9/2004 0:00 | 30.507 | 42.173 | 35.968 | 45.794 | 30.571 | 5.055 | 24.104 | 5.866 |
| 11/9/2004 4:00 | 30.502 | 42.163 | 35.962 | 45.789 | 30.562 | 5.047 | 24.104 | 5.86 |
| 11/9/2004 8:00 | 30.505 | 42.159 | 35.968 | 45.817 | 30.571 | 5.043 | 24.104 | 5.857 |
| 11/9/2004 12:00 | 30.502 | 42.159 | 35.964 | 45.78 | 30.573 | 5.059 | 24.104 | 5.853 |
| 11/9/2004 16:00 | 30.492 | 42.112 | 35.932 | 45.771 | 30.558 | 5.051 | 24.098 | 5.838 |
| 11/9/2004 20:00 | 30.49 | 42.116 | 35.942 | 45.789 | 30.556 | 5.039 | 24.098 | 5.84 |
| 11/10/2004 0:00 | 30.49 | 42.133 | 35.955 | 45.761 | 30.56 | 5.038 | 24.102 | 5.845 |
| 11/10/2004 4:00 | 30.465 | 42.129 | 35.954 | 45.784 | 30.554 | 5.011 | 24.098 | 5.84 |
| 11/10/2004 8:00 | 30.49 | 42.126 | 35.953 | 45.752 | 30.558 | 5.015 | 24.102 | 5.836 |
| 11/10/2004 12:00 | 30.497 | 42.148 | 35.97 | 45.782 | 30.567 | 5.019 | 24.106 | 5.843 |
| 11/10/2004 16:00 | 30.497 | 42.156 | 35.98 | 45.759 | 30.569 | 5.03 | 24.109 | 5.84 |
| 11/10/2004 20:00 | 30.509 | 42.204 | 36.02 | 45.812 | 30.638 | 5.026 | 24.115 | 5.851 |
| 11/11/2004 0:00 | 30.522 | 42.25 | 36.034 | 45.838 | 30.606 | 5.048 | 24.123 | 5.86 |
| 11/11/2004 4:00 | 30.522 | 42.276 | 36.052 | 45.819 | 30.608 | 5.081 | 24.127 | 5.857 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 11/11/2004 8:00 | 30.542 | 42.308 | 36.072 | 45.84 | 30.621 | 5.067 | 24.135 | 5.866 |
| 11/11/2004 12:00 | 30.55 | 42.332 | 36.074 | 45.851 | 30.638 | 5.053 | 24.137 | 5.862 |
| 11/11/2004 16:00 | 30.537 | 42.291 | 36.048 | 45.847 | 30.627 | 5.071 | 24.137 | 5.847 |
| 11/11/2004 20:00 | 30.55 | 42.299 | 36.066 | 45.861 | 30.634 | 5.068 | 24.14 | 5.851 |
| 11/12/2004 0:00 | 30.557 | 42.317 | 36.076 | 45.874 | 30.649 | 5.05 | 24.146 | 5.853 |
| 11/12/2004 4:00 | 30.55 | 42.314 | 36.078 | 45.881 | 30.642 | 5.052 | 24.148 | 5.851 |
| 11/12/2004 8:00 | 30.559 | 42.327 | 36.094 | 45.888 | 30.647 | 5.054 | 24.152 | 5.856 |
| 11/12/2004 12:00 | 30.567 | 42.353 | 36.102 | 45.93 | 30.664 | 5.068 | 24.156 | 5.858 |
| 11/12/2004 16:00 | 30.559 | 42.329 | 36.09 | 45.928 | 30.655 | 5.062 | 24.156 | 5.849 |
| 11/12/2004 20:00 | 30.577 | 42.351 | 36.114 | 45.918 | 30.672 | 5.064 | 24.161 | 5.856 |
| 11/13/2004 0:00 | 30.582 | 42.374 | 36.126 | 45.935 | 30.686 | 5.06 | 24.167 | 5.86 |
| 11/13/2004 4:00 | 30.579 | 42.378 | 36.127 | 45.967 | 30.683 | 5.066 | 24.169 | 5.858 |
| 11/13/2004 8:00 | 30.574 | 42.385 | 36.135 | 45.976 | 30.683 | 5.052 | 24.173 | 5.862 |
| 11/13/2004 12:00 | 30.587 | 42.396 | 36.133 | 45.976 | 30.694 | 5.068 | 24.175 | 5.858 |
| 11/13/2004 16:00 | 30.564 | 42.366 | 36.122 | 45.972 | 30.683 | 5.076 | 24.173 | 5.849 |
| 11/13/2004 20:00 | 30.587 | 42.372 | 36.137 | 45.972 | 30.69 | 5.076 | 24.177 | 5.851 |
| 11/14/2004 0:00 | 30.584 | 42.389 | 36.145 | 45.976 | 30.705 | 5.084 | 24.179 | 5.853 |
| 11/14/2004 4:00 | 30.589 | 42.393 | 36.141 | 45.946 | 30.701 | 5.074 | 24.181 | 5.851 |
| 11/14/2004 8:00 | 30.592 | 42.389 | 36.15 | 45.978 | 30.698 | 5.093 | 24.185 | 5.851 |
| 11/14/2004 12:00 | 30.589 | 42.406 | 36.156 | 45.988 | 30.709 | 5.091 | 24.186 | 5.851 |
| 11/14/2004 16:00 | 30.597 | 42.378 | 36.147 | 45.951 | 30.705 | 5.105 | 24.185 | 5.845 |
| 11/14/2004 20:00 | 30.599 | 42.402 | 36.162 | 45.951 | 30.707 | 5.113 | 24.189 | 5.849 |
| 11/15/2004 0:00 | 30.604 | 42.428 | 36.164 | 45.985 | 30.718 | 5.078 | 24.193 | 5.849 |
| 11/15/2004 4:00 | 30.599 | 42.413 | 36.163 | 45.958 | 30.714 | 5.113 | 24.192 | 5.845 |
| 11/15/2004 8:00 | 30.589 | 42.415 | 36.168 | 45.983 | 30.707 | 5.125 | 24.195 | 5.843 |
| 11/15/2004 12:00 | 30.602 | 42.415 | 36.167 | 45.995 | 30.711 | 5.121 | 24.196 | 5.841 |
| 11/15/2004 16:00 | 30.594 | 42.389 | 36.151 | 45.983 | 30.705 | 5.111 | 24.192 | 5.833 |
| 11/15/2004 20:00 | 30.594 | 42.381 | 36.153 | 45.983 | 30.703 | 5.113 | 24.192 | 5.83 |
| 11/16/2004 0:00 | 30.597 | 42.376 | 36.153 | 45.946 | 30.707 | 5.115 | 24.192 | 5.828 |
| 11/16/2004 4:00 | 30.594 | 42.372 | 36.149 | 45.972 | 30.705 | 5.121 | 24.195 | 5.824 |
| 11/16/2004 8:00 | 30.584 | 42.372 | 36.157 | 45.965 | 30.698 | 5.103 | 24.195 | 5.826 |
| 11/16/2004 12:00 | 30.594 | 42.381 | 36.155 | 45.962 | 30.709 | 5.09 | 24.195 | 5.822 |
| 11/16/2004 16:00 | 30.589 | 42.359 | 36.145 | 45.951 | 30.707 | 5.103 | 24.193 | 5.818 |
| 11/16/2004 20:00 | 30.597 | 42.376 | 36.161 | 45.96 | 30.714 | 5.111 | 24.197 | 5.818 |
| 11/17/2004 0:00 | 30.602 | 42.387 | 36.173 | 45.972 | 30.718 | 5.108 | 24.2 | 5.822 |
| 11/17/2004 4:00 | 30.599 | 42.404 | 36.181 | 45.976 | 30.722 | 5.104 | 24.191 | 5.822 |
| 11/17/2004 8:00 | 30.609 | 42.415 | 36.189 | 45.985 | 30.724 | 5.11 | 24.204 | 5.822 |
| 11/17/2004 12:00 | 30.617 | 42.432 | 36.195 | 45.995 | 30.726 | 5.11 | 24.208 | 5.822 |
| 11/17/2004 16:00 | 30.612 | 42.406 | 36.179 | 45.992 | 30.72 | 5.11 | 24.206 | 5.813 |
| 11/17/2004 20:00 | 30.617 | 42.421 | 36.203 | 46.009 | 30.729 | 5.104 | 24.212 | 5.82 |
| 11/18/2004 0:00 | 30.622 | 42.432 | 36.205 | 46.015 | 30.733 | 5.127 | 24.214 | 5.82 |
| 11/18/2004 4:00 | 30.624 | 42.425 | 36.203 | 45.988 | 30.737 | 5.125 | 24.216 | 5.816 |
| 11/18/2004 8:00 | 30.622 | 42.428 | 36.209 | 45.992 | 30.739 | 5.114 | 24.218 | 5.818 |
| 11/18/2004 12:00 | 30.622 | 42.423 | 36.205 | 46.018 | 30.731 | 5.114 | 24.22 | 5.809 |
| 11/18/2004 16:00 | 30.612 | 42.387 | 36.187 | 45.978 | 30.726 | 5.112 | 24.216 | 5.803 |
| 11/18/2004 20:00 | 30.612 | 42.387 | 36.195 | 46.013 | 30.722 | 5.098 | 24.216 | 5.803 |
| 11/19/2004 0:00 | 30.584 | 42.374 | 36.193 | 45.976 | 30.707 | 5.106 | 24.212 | 5.801 |
| 11/19/2004 4:00 | 30.592 | 42.353 | 36.185 | 45.962 | 30.698 | 5.098 | 24.21 | 5.797 |
| 11/19/2004 8:00 | 30.594 | 42.34 | 36.189 | 45.981 | 30.694 | 5.102 | 24.21 | 5.797 |
| 11/19/2004 12:00 | 30.607 | 42.355 | 36.207 | 45.967 | 30.696 | 5.106 | 24.216 | 5.801 |
| 11/19/2004 16:00 | 30.599 | 42.336 | 36.199 | 45.962 | 30.692 | 5.091 | 24.214 | 5.795 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 11/19/2004 20:00 | 30.604 | 42.378 | 36.237 | 45.985 | 30.705 | 5.083 | 24.224 | 5.807 |
| 11/20/2004 0:00 | 30.614 | 42.4 | 36.241 | 46.02 | 30.716 | 5.087 | 24.228 | 5.809 |
| 11/20/2004 4:00 | 30.629 | 42.423 | 36.255 | 46.027 | 30.724 | 5.095 | 24.231 | 5.816 |
| 11/20/2004 8:00 | 30.634 | 42.455 | 36.277 | 46.043 | 30.742 | 5.091 | 24.237 | 5.824 |
| 11/20/2004 12:00 | 30.631 | 42.487 | 36.285 | 46.057 | 30.75 | 5.097 | 24.243 | 5.829 |
| 11/20/2004 16:00 | 30.649 | 42.481 | 36.281 | 46.076 | 30.754 | 5.112 | 24.245 | 5.822 |
| 11/20/2004 20:00 | 30.664 | 42.522 | 36.313 | 46.096 | 30.78 | 5.126 | 24.251 | 5.835 |
| 11/21/2004 0:00 | 30.639 | 42.549 | 36.322 | 46.115 | 30.782 | 5.109 | 24.255 | 5.841 |
| 11/21/2004 4:00 | 30.664 | 42.545 | 36.314 | 46.089 | 30.785 | 5.107 | 24.26 | 5.833 |
| 11/21/2004 8:00 | 30.669 | 42.547 | 36.324 | 46.122 | 30.793 | 5.099 | 24.264 | 5.835 |
| 11/21/2004 12:00 | 30.676 | 42.545 | 36.318 | 46.124 | 30.793 | 5.101 | 24.266 | 5.831 |
| 11/21/2004 16:00 | 30.679 | 42.492 | 36.289 | 46.112 | 30.781 | 5.093 | 24.262 | 5.814 |
| 11/21/2004 20:00 | 30.671 | 42.49 | 36.303 | 46.122 | 30.785 | 5.103 | 24.266 | 5.818 |
| 11/22/2004 0:00 | 30.669 | 42.479 | 36.313 | 46.119 | 30.78 | 5.101 | 24.266 | 5.82 |
| 11/22/2004 4:00 | 30.651 | 42.443 | 36.287 | 46.096 | 30.77 | 5.079 | 24.262 | 5.805 |
| 11/22/2004 8:00 | 30.654 | 42.434 | 36.293 | 46.052 | 30.77 | 5.115 | 24.264 | 5.807 |
| 11/22/2004 12:00 | 30.654 | 42.423 | 36.285 | 46.041 | 30.77 | 5.113 | 24.262 | 5.801 |
| 11/22/2004 16:00 | 30.639 | 42.381 | 36.265 | 46.045 | 30.754 | 5.136 | 24.257 | 5.791 |
| 11/22/2004 20:00 | 30.644 | 42.381 | 36.281 | 46.018 | 30.763 | 5.13 | 24.259 | 5.795 |
| 11/23/2004 0:00 | 30.646 | 42.396 | 36.291 | 46.02 | 30.765 | 5.134 | 24.26 | 5.797 |
| 11/23/2004 4:00 | 30.622 | 42.398 | 36.291 | 46.048 | 30.759 | 5.128 | 24.262 | 5.797 |
| 11/23/2004 8:00 | 30.651 | 42.425 | 36.32 | 46.022 | 30.772 | 5.14 | 24.268 | 5.805 |
| 11/23/2004 12:00 | 30.664 | 42.455 | 36.328 | 46.062 | 30.796 | 5.128 | 24.272 | 5.81 |
| 11/23/2004 16:00 | 30.651 | 42.425 | 36.307 | 46.025 | 30.785 | 5.113 | 24.27 | 5.797 |
| 11/23/2004 20:00 | 30.666 | 42.436 | 36.326 | 46.043 | 30.789 | 5.113 | 24.276 | 5.803 |
| 11/24/2004 0:00 | 30.669 | 42.46 | 36.34 | 46.085 | 30.798 | 5.141 | 24.28 | 5.808 |
| 11/24/2004 4:00 | 30.662 | 42.451 | 36.334 | 46.085 | 30.791 | 5.152 | 24.28 | 5.801 |
| 11/24/2004 8:00 | 30.669 | 42.458 | 36.344 | 46.085 | 30.796 | 5.152 | 24.28 | 5.803 |
| 11/24/2004 12:00 | 30.674 | 42.477 | 36.346 | 46.057 | 30.802 | 5.141 | 24.284 | 5.803 |
| 11/24/2004 16:00 | 30.669 | 42.466 | 36.34 | 46.055 | 30.798 | 5.154 | 24.284 | 5.797 |
| 11/24/2004 20:00 | 30.686 | 42.502 | 36.368 | 46.103 | 30.813 | 5.16 | 24.289 | 5.81 |
| 11/25/2004 0:00 | 30.686 | 42.517 | 36.368 | 46.108 | 30.819 | 5.143 | 24.291 | 5.81 |
| 11/25/2004 4:00 | 30.662 | 42.496 | 36.356 | 46.108 | 30.809 | 5.176 | 24.288 | 5.801 |
| 11/25/2004 8:00 | 30.677 | 42.475 | 36.34 | 46.094 | 30.804 | 5.159 | 24.289 | 5.791 |
| 11/25/2004 12:00 | 30.686 | 42.47 | 36.346 | 46.089 | 30.809 | 5.159 | 24.289 | 5.791 |
| 11/25/2004 16:00 | 30.667 | 42.425 | 36.326 | 46.078 | 30.796 | 5.151 | 24.286 | 5.78 |
| 11/25/2004 20:00 | 30.677 | 42.447 | 36.354 | 46.082 | 30.807 | 5.158 | 24.289 | 5.791 |
| 11/26/2004 0:00 | 30.679 | 42.46 | 36.354 | 46.08 | 30.813 | 5.157 | 24.291 | 5.788 |
| 11/26/2004 4:00 | 30.674 | 42.453 | 36.354 | 46.048 | 30.804 | 5.149 | 24.291 | 5.784 |
| 11/26/2004 8:00 | 30.674 | 42.453 | 36.36 | 46.064 | 30.804 | 5.11 | 24.291 | 5.784 |
| 11/26/2004 12:00 | 30.682 | 42.464 | 36.36 | 46.071 | 30.813 | 5.137 | 24.293 | 5.786 |
| 11/26/2004 16:00 | 30.667 | 42.421 | 36.342 | 46.05 | 30.804 | 5.147 | 24.288 | 5.776 |
| 11/26/2004 20:00 | 30.682 | 42.451 | 36.368 | 46.071 | 30.815 | 5.153 | 24.295 | 5.784 |
| 11/27/2004 0:00 | 30.669 | 42.468 | 36.374 | 46.078 | 30.822 | 5.139 | 24.289 | 5.786 |
| 11/27/2004 4:00 | 30.684 | 42.502 | 36.408 | 46.066 | 30.815 | 5.143 | 24.303 | 5.799 |
| 11/27/2004 8:00 | 30.696 | 42.554 | 36.436 | 46.122 | 30.832 | 5.145 | 24.309 | 5.814 |
| 11/27/2004 12:00 | 30.709 | 42.598 | 36.452 | 46.115 | 30.85 | 5.153 | 24.315 | 5.822 |
| 11/27/2004 16:00 | 30.716 | 42.588 | 36.44 | 46.156 | 30.852 | 5.163 | 24.319 | 5.814 |
| 11/27/2004 20:00 | 30.709 | 42.613 | 36.466 | 46.161 | 30.865 | 5.165 | 24.324 | 5.825 |
| 11/28/2004 0:00 | 30.736 | 42.628 | 36.466 | 46.177 | 30.88 | 5.163 | 24.33 | 5.827 |
| 11/28/2004 4:00 | 30.741 | 42.626 | 36.472 | 46.226 | 30.882 | 5.163 | 24.336 | 5.827 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 11/28/2004 8:00 | 30.741 | 42.631 | 36.478 | 46.228 | 30.882 | 5.138 | 24.34 | 5.829 |
| 11/28/2004 12:00 | 30.744 | 42.622 | 36.468 | 46.228 | 30.884 | 5.147 | 24.34 | 5.822 |
| 11/28/2004 16:00 | 30.749 | 42.588 | 36.458 | 46.2 | 30.875 | 5.167 | 24.34 | 5.81 |
| 11/28/2004 20:00 | 30.749 | 42.598 | 36.482 | 46.216 | 30.88 | 5.157 | 24.344 | 5.818 |
| 11/29/2004 0:00 | 30.758 | 42.633 | 36.497 | 46.263 | 30.897 | 5.178 | 24.35 | 5.827 |
| 11/29/2004 4:00 | 30.761 | 42.654 | 36.502 | 46.263 | 30.884 | 5.169 | 24.353 | 5.823 |
| 11/29/2004 8:00 | 30.753 | 42.671 | 36.519 | 46.249 | 30.873 | 5.152 | 24.357 | 5.825 |
| 11/29/2004 12:00 | 30.763 | 42.705 | 36.517 | 46.253 | 30.888 | 5.161 | 24.361 | 5.825 |
| 11/29/2004 16:00 | 30.763 | 42.695 | 36.513 | 46.258 | 30.886 | 5.152 | 24.353 | 5.822 |
| 11/29/2004 20:00 | 30.773 | 42.716 | 36.547 | 46.286 | 30.884 | 5.185 | 24.348 | 5.835 |
| 11/30/2004 0:00 | 30.761 | 42.703 | 36.533 | 46.32 | 30.88 | 5.167 | 24.348 | 5.829 |
| 11/30/2004 4:00 | 30.751 | 42.665 | 36.513 | 46.279 | 30.865 | 5.171 | 24.346 | 5.818 |
| 11/30/2004 8:00 | 30.746 | 42.637 | 36.521 | 46.295 | 30.856 | 5.154 | 24.35 | 5.818 |
| 11/30/2004 12:00 | 30.744 | 42.628 | 36.515 | 46.281 | 30.847 | 5.169 | 24.35 | 5.812 |
| 11/30/2004 16:00 | 30.714 | 42.592 | 36.509 | 46.265 | 30.83 | 5.15 | 24.348 | 5.803 |
| 11/30/2004 20:00 | 30.736 | 42.596 | 36.529 | 46.281 | 30.828 | 5.169 | 24.35 | 5.808 |
| 12/1/2004 0:00 | 30.736 | 42.609 | 36.543 | 46.3 | 30.83 | 5.156 | 24.356 | 5.816 |
| 12/1/2004 4:00 | 30.739 | 42.609 | 36.551 | 46.304 | 30.837 | 5.17 | 24.362 | 5.818 |
| 12/1/2004 8:00 | 30.746 | 42.622 | 36.563 | 46.316 | 30.837 | 5.181 | 24.367 | 5.823 |
| 12/1/2004 12:00 | 30.753 | 42.648 | 36.575 | 46.3 | 30.85 | 5.173 | 24.371 | 5.827 |
| 12/1/2004 16:00 | 30.749 | 42.62 | 36.561 | 46.293 | 30.841 | 5.173 | 24.373 | 5.816 |
| 12/1/2004 20:00 | 30.756 | 42.617 | 36.573 | 46.337 | 30.843 | 5.164 | 24.377 | 5.818 |
| 12/2/2004 0:00 | 30.756 | 42.615 | 36.573 | 46.339 | 30.841 | 5.166 | 24.377 | 5.816 |
| 12/2/2004 4:00 | 30.753 | 42.607 | 36.579 | 46.316 | 30.841 | 5.175 | 24.381 | 5.818 |
| 12/2/2004 8:00 | 30.751 | 42.598 | 36.583 | 46.341 | 30.835 | 5.154 | 24.381 | 5.816 |
| 12/2/2004 12:00 | 30.761 | 42.62 | 36.593 | 46.35 | 30.843 | 5.181 | 24.385 | 5.823 |
| 12/2/2004 16:00 | 30.729 | 42.601 | 36.589 | 46.346 | 30.832 | 5.17 | 24.387 | 5.814 |
| 12/2/2004 20:00 | 30.761 | 42.601 | 36.593 | 46.314 | 30.839 | 5.164 | 24.389 | 5.814 |
| 12/3/2004 0:00 | 30.758 | 42.586 | 36.591 | 46.355 | 30.837 | 5.149 | 24.391 | 5.81 |
| 12/3/2004 4:00 | 30.756 | 42.577 | 36.597 | 46.346 | 30.835 | 5.142 | 24.391 | 5.808 |
| 12/3/2004 8:00 | 30.739 | 42.558 | 36.587 | 46.3 | 30.822 | 5.145 | 24.391 | 5.801 |
| 12/3/2004 12:00 | 30.751 | 42.558 | 36.595 | 46.32 | 30.819 | 5.145 | 24.391 | 5.806 |
| 12/3/2004 16:00 | 30.741 | 42.53 | 36.581 | 46.304 | 30.85 | 5.133 | 24.387 | 5.795 |
| 12/3/2004 20:00 | 30.739 | 42.534 | 36.597 | 46.309 | 30.813 | 5.164 | 24.391 | 5.799 |
| 12/4/2004 0:00 | 30.744 | 42.532 | 36.599 | 46.304 | 30.815 | 5.158 | 24.393 | 5.799 |
| 12/4/2004 4:00 | 30.741 | 42.515 | 36.595 | 46.29 | 30.811 | 5.143 | 24.391 | 5.793 |
| 12/4/2004 8:00 | 30.746 | 42.517 | 36.599 | 46.281 | 30.805 | 5.145 | 24.391 | 5.795 |
| 12/4/2004 12:00 | 30.749 | 42.543 | 36.615 | 46.29 | 30.809 | 5.141 | 24.394 | 5.801 |
| 12/4/2004 16:00 | 30.756 | 42.543 | 36.619 | 46.295 | 30.805 | 5.141 | 24.394 | 5.797 |
| 12/4/2004 20:00 | 30.756 | 42.571 | 36.635 | 46.288 | 30.811 | 5.143 | 24.4 | 5.808 |
| 12/5/2004 0:00 | 30.761 | 42.59 | 36.639 | 46.33 | 30.815 | 5.122 | 24.404 | 5.81 |
| 12/5/2004 4:00 | 30.761 | 42.581 | 36.635 | 46.332 | 30.817 | 5.122 | 24.404 | 5.806 |
| 12/5/2004 8:00 | 30.756 | 42.554 | 36.625 | 46.318 | 30.813 | 5.124 | 24.404 | 5.797 |
| 12/5/2004 12:00 | 30.746 | 42.53 | 36.603 | 46.302 | 30.803 | 5.124 | 24.4 | 5.786 |
| 12/5/2004 16:00 | 30.719 | 42.468 | 36.581 | 46.244 | 30.736 | 5.087 | 24.385 | 5.765 |
| 12/5/2004 20:00 | 30.697 | 42.443 | 36.609 | 46.274 | 30.69 | 5.087 | 24.321 | 5.776 |
| 12/6/2004 0:00 | 30.672 | 42.425 | 36.621 | 46.279 | 30.684 | 5.099 | 24.3 | 5.78 |
| 12/6/2004 4:00 | 30.66 | 42.432 | 36.641 | 46.255 | 30.678 | 5.079 | 24.3 | 5.788 |
| 12/6/2004 8:00 | 30.672 | 42.434 | 36.647 | 46.267 | 30.68 | 5.114 | 24.309 | 5.789 |
| 12/6/2004 12:00 | 30.669 | 42.434 | 36.651 | 46.295 | 30.671 | 5.093 | 24.317 | 5.786 |
| 12/6/2004 16:00 | 30.655 | 42.385 | 36.627 | 46.251 | 30.65 | 5.099 | 24.317 | 5.769 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 12/6/2004 20:00 | 30.657 | 42.389 | 36.657 | 46.3 | 30.656 | 5.105 | 24.323 | 5.776 |
| 12/7/2004 0:00 | 30.657 | 42.378 | 36.647 | 46.302 | 30.643 | 5.111 | 24.327 | 5.769 |
| 12/7/2004 4:00 | 30.657 | 42.376 | 36.661 | 46.313 | 30.641 | 5.097 | 24.332 | 5.774 |
| 12/7/2004 8:00 | 30.669 | 42.428 | 36.694 | 46.344 | 30.658 | 5.122 | 24.344 | 5.788 |
| 12/7/2004 12:00 | 30.689 | 42.474 | 36.71 | 46.371 | 30.676 | 5.103 | 24.356 | 5.797 |
| 12/7/2004 16:00 | 30.694 | 42.468 | 36.702 | 46.378 | 30.678 | 5.118 | 24.362 | 5.788 |
| 12/7/2004 20:00 | 30.699 | 42.475 | 36.704 | 46.364 | 30.684 | 5.113 | 24.367 | 5.788 |
| 12/8/2004 0:00 | 30.702 | 42.5 | 36.72 | 46.408 | 30.689 | 5.124 | 24.377 | 5.795 |
| 12/8/2004 4:00 | 30.674 | 42.468 | 36.704 | 46.378 | 30.676 | 5.136 | 24.375 | 5.782 |
| 12/8/2004 8:00 | 30.699 | 42.457 | 36.712 | 46.411 | 30.676 | 5.125 | 24.379 | 5.782 |
| 12/8/2004 12:00 | 30.687 | 42.438 | 36.695 | 46.369 | 30.667 | 5.121 | 24.377 | 5.765 |
| 12/8/2004 16:00 | 30.665 | 42.357 | 36.661 | 46.362 | 30.643 | 5.13 | 24.368 | 5.746 |
| 12/8/2004 20:00 | 30.677 | 42.37 | 36.695 | 46.35 | 30.654 | 5.125 | 24.374 | 5.759 |
| 12/9/2004 0:00 | 30.655 | 42.367 | 36.695 | 46.369 | 30.65 | 5.121 | 24.372 | 5.757 |
| 12/9/2004 4:00 | 30.669 | 42.37 | 36.7 | 46.371 | 30.643 | 5.119 | 24.377 | 5.752 |
| 12/9/2004 8:00 | 30.672 | 42.374 | 36.704 | 46.364 | 30.641 | 5.121 | 24.377 | 5.752 |
| 12/9/2004 12:00 | 30.677 | 42.385 | 36.708 | 46.332 | 30.648 | 5.111 | 24.379 | 5.75 |
| 12/9/2004 16:00 | 30.674 | 42.374 | 36.712 | 46.332 | 30.643 | 5.105 | 24.379 | 5.752 |
| 12/9/2004 20:00 | 30.702 | 42.434 | 36.746 | 46.38 | 30.669 | 5.119 | 24.393 | 5.769 |
| 12/10/2004 0:00 | 30.712 | 42.474 | 36.758 | 46.404 | 30.691 | 5.139 | 24.401 | 5.78 |
| 12/10/2004 4:00 | 30.712 | 42.491 | 36.762 | 46.415 | 30.695 | 5.107 | 24.405 | 5.78 |
| 12/10/2004 8:00 | 30.719 | 42.511 | 36.774 | 46.461 | 30.704 | 5.129 | 24.41 | 5.786 |
| 12/10/2004 12:00 | 30.739 | 42.554 | 36.79 | 46.445 | 30.727 | 5.112 | 24.418 | 5.795 |
| 12/10/2004 16:00 | 30.719 | 42.562 | 36.792 | 46.487 | 30.732 | 5.127 | 24.418 | 5.795 |
| 12/10/2004 20:00 | 30.754 | 42.587 | 36.802 | 46.501 | 30.749 | 5.127 | 24.428 | 5.801 |
| 12/11/2004 0:00 | 30.759 | 42.59 | 36.794 | 46.478 | 30.76 | 5.135 | 24.43 | 5.797 |
| 12/11/2004 4:00 | 30.746 | 42.573 | 36.792 | 46.473 | 30.755 | 5.094 | 24.432 | 5.791 |
| 12/11/2004 8:00 | 30.734 | 42.564 | 36.798 | 46.501 | 30.753 | 5.121 | 24.43 | 5.791 |
| 12/11/2004 12:00 | 30.752 | 42.549 | 36.786 | 46.487 | 30.755 | 5.102 | 24.432 | 5.782 |
| 12/11/2004 16:00 | 30.719 | 42.476 | 36.752 | 46.461 | 30.734 | 5.15 | 24.422 | 5.759 |
| 12/11/2004 20:00 | 30.729 | 42.451 | 36.76 | 46.413 | 30.725 | 5.15 | 24.422 | 5.761 |
| 12/12/2004 0:00 | 30.732 | 42.427 | 36.756 | 46.397 | 30.723 | 5.162 | 24.42 | 5.754 |
| 12/12/2004 4:00 | 30.719 | 42.432 | 36.774 | 46.418 | 30.719 | 5.148 | 24.42 | 5.761 |
| 12/12/2004 8:00 | 30.739 | 42.491 | 36.816 | 46.443 | 30.734 | 5.156 | 24.432 | 5.78 |
| 12/12/2004 12:00 | 30.769 | 42.596 | 36.848 | 46.493 | 30.772 | 5.159 | 24.445 | 5.807 |
| 12/12/2004 16:00 | 30.759 | 42.615 | 36.841 | 46.475 | 30.783 | 5.153 | 24.445 | 5.805 |
| 12/12/2004 20:00 | 30.794 | 42.645 | 36.861 | 46.507 | 30.803 | 5.176 | 24.457 | 5.816 |
| 12/13/2004 0:00 | 30.808 | 42.692 | 36.875 | 46.533 | 30.828 | 5.174 | 24.463 | 5.825 |
| 12/13/2004 4:00 | 30.804 | 42.701 | 36.882 | 46.57 | 30.839 | 5.19 | 24.466 | 5.826 |
| 12/13/2004 8:00 | 30.814 | 42.711 | 36.889 | 46.551 | 30.844 | 5.161 | 24.47 | 5.833 |
| 12/13/2004 12:00 | 30.831 | 42.748 | 36.901 | 46.561 | 30.867 | 5.178 | 24.48 | 5.843 |
| 12/13/2004 16:00 | 30.814 | 42.739 | 36.897 | 46.595 | 30.869 | 5.19 | 24.474 | 5.837 |
| 12/13/2004 20:00 | 30.844 | 42.765 | 36.921 | 46.619 | 30.889 | 5.196 | 24.488 | 5.848 |
| 12/14/2004 0:00 | 30.853 | 42.771 | 36.921 | 46.593 | 30.904 | 5.19 | 24.492 | 5.85 |
| 12/14/2004 4:00 | 30.858 | 42.782 | 36.933 | 46.632 | 30.909 | 5.21 | 24.496 | 5.852 |
| 12/14/2004 8:00 | 30.854 | 42.763 | 36.931 | 46.635 | 30.904 | 5.197 | 24.497 | 5.848 |
| 12/14/2004 12:00 | 30.853 | 42.754 | 36.917 | 46.63 | 30.904 | 5.215 | 24.499 | 5.839 |
| 12/14/2004 16:00 | 30.843 | 42.688 | 36.893 | 46.572 | 30.894 | 5.186 | 24.492 | 5.818 |
| 12/14/2004 20:00 | 30.841 | 42.662 | 36.899 | 46.602 | 30.885 | 5.184 | 24.492 | 5.814 |
| 12/15/2004 0:00 | 30.836 | 42.643 | 36.895 | 46.584 | 30.879 | 5.177 | 24.492 | 5.807 |
| 12/15/2004 4:00 | 30.829 | 42.615 | 36.885 | 46.533 | 30.87 | 5.19 | 24.488 | 5.799 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 12/15/2004 8:00 | 30.813 | 42.6 | 36.881 | 46.514 | 30.849 | 5.182 | 24.486 | 5.792 |
| 12/15/2004 12:00 | 30.824 | 42.609 | 36.895 | 46.54 | 30.851 | 5.186 | 24.486 | 5.797 |
| 12/15/2004 16:00 | 30.819 | 42.594 | 36.887 | 46.519 | 30.864 | 5.173 | 24.482 | 5.79 |
| 12/15/2004 20:00 | 30.831 | 42.622 | 36.919 | 46.537 | 30.866 | 5.163 | 24.492 | 5.801 |
| 12/16/2004 0:00 | 30.834 | 42.632 | 36.921 | 46.538 | 30.875 | 5.192 | 24.496 | 5.801 |
| 12/16/2004 4:00 | 30.841 | 42.656 | 36.937 | 46.549 | 30.892 | 5.192 | 24.5 | 5.809 |
| 12/16/2004 8:00 | 30.844 | 42.675 | 36.949 | 46.558 | 30.898 | 5.184 | 24.505 | 5.814 |
| 12/16/2004 12:00 | 30.846 | 42.716 | 36.957 | 46.574 | 30.922 | 5.186 | 24.509 | 5.822 |
| 12/16/2004 16:00 | 30.861 | 42.707 | 36.949 | 46.549 | 30.935 | 5.191 | 24.511 | 5.814 |
| 12/16/2004 20:00 | 30.878 | 42.726 | 36.965 | 46.591 | 30.937 | 5.188 | 24.515 | 5.82 |
| 12/17/2004 0:00 | 30.873 | 42.728 | 36.963 | 46.6 | 30.939 | 5.191 | 24.519 | 5.818 |
| 12/17/2004 4:00 | 30.876 | 42.724 | 36.965 | 46.6 | 30.948 | 5.191 | 24.521 | 5.818 |
| 12/17/2004 8:00 | 30.873 | 42.713 | 36.965 | 46.6 | 30.946 | 5.198 | 24.523 | 5.816 |
| 12/17/2004 12:00 | 30.868 | 42.692 | 36.949 | 46.589 | 30.941 | 5.191 | 24.519 | 5.805 |
| 12/17/2004 16:00 | 30.856 | 42.622 | 36.925 | 46.526 | 30.924 | 5.189 | 24.513 | 5.784 |
| 12/17/2004 20:00 | 30.856 | 42.622 | 36.945 | 46.558 | 30.924 | 5.183 | 24.513 | 5.786 |
| 12/18/2004 0:00 | 30.856 | 42.626 | 36.959 | 46.554 | 30.926 | 5.196 | 24.517 | 5.792 |
| 12/18/2004 4:00 | 30.859 | 42.649 | 36.965 | 46.552 | 30.928 | 5.198 | 24.519 | 5.794 |
| 12/18/2004 8:00 | 30.868 | 42.666 | 36.975 | 46.528 | 30.941 | 5.21 | 24.523 | 5.799 |
| 12/18/2004 12:00 | 30.876 | 42.711 | 36.985 | 46.542 | 30.946 | 5.208 | 24.527 | 5.807 |
| 12/18/2004 16:00 | 30.886 | 42.718 | 36.991 | 46.584 | 30.954 | 5.234 | 24.531 | 5.807 |
| 12/18/2004 20:00 | 30.898 | 42.778 | 37.019 | 46.618 | 30.978 | 5.206 | 24.539 | 5.826 |
| 12/19/2004 0:00 | 30.913 | 42.827 | 37.036 | 46.646 | 30.995 | 5.222 | 24.546 | 5.841 |
| 12/19/2004 4:00 | 30.918 | 42.85 | 37.038 | 46.66 | 31.006 | 5.203 | 24.552 | 5.845 |
| 12/19/2004 8:00 | 30.923 | 42.876 | 37.042 | 46.671 | 31.018 | 5.22 | 24.556 | 5.847 |
| 12/19/2004 12:00 | 30.926 | 42.861 | 37.034 | 46.674 | 31.018 | 5.23 | 24.558 | 5.841 |
| 12/19/2004 16:00 | 30.916 | 42.78 | 36.993 | 46.621 | 30.999 | 5.222 | 24.55 | 5.811 |
| 12/19/2004 20:00 | 30.898 | 42.75 | 36.989 | 46.628 | 30.98 | 5.212 | 24.544 | 5.8 |
| 12/20/2004 0:00 | 30.863 | 42.728 | 36.969 | 46.567 | 30.952 | 5.201 | 24.542 | 5.786 |
| 12/20/2004 4:00 | 30.854 | 42.649 | 36.935 | 46.551 | 30.922 | 5.181 | 24.529 | 5.762 |
| 12/20/2004 8:00 | 30.814 | 42.592 | 36.925 | 46.515 | 30.898 | 5.185 | 24.521 | 5.754 |
| 12/20/2004 12:00 | 30.829 | 42.577 | 36.913 | 46.48 | 30.885 | 5.177 | 24.509 | 5.739 |
| 12/20/2004 16:00 | 30.839 | 42.607 | 36.957 | 46.452 | 30.894 | 5.188 | 24.515 | 5.762 |
| 12/20/2004 20:00 | 30.868 | 42.728 | 37.025 | 46.528 | 30.939 | 5.183 | 24.535 | 5.805 |
| 12/21/2004 0:00 | 30.878 | 42.786 | 37.019 | 46.519 | 30.956 | 5.193 | 24.542 | 5.807 |
| 12/21/2004 4:00 | 30.891 | 42.812 | 37.031 | 46.563 | 30.967 | 5.192 | 24.55 | 5.813 |
| 12/21/2004 8:00 | 30.911 | 42.865 | 37.06 | 46.556 | 30.987 | 5.203 | 24.558 | 5.828 |
| 12/21/2004 12:00 | 30.938 | 42.925 | 37.068 | 46.593 | 31.01 | 5.211 | 24.568 | 5.838 |
| 12/21/2004 16:00 | 30.928 | 42.91 | 37.054 | 46.6 | 31.01 | 5.193 | 24.568 | 5.828 |
| 12/21/2004 20:00 | 30.945 | 42.94 | 37.08 | 46.625 | 31.03 | 5.215 | 24.576 | 5.843 |
| 12/22/2004 0:00 | 30.955 | 42.976 | 37.092 | 46.655 | 31.042 | 5.215 | 24.581 | 5.851 |
| 12/22/2004 4:00 | 30.933 | 42.978 | 37.092 | 46.667 | 31.045 | 5.219 | 24.583 | 5.851 |
| 12/22/2004 8:00 | 30.965 | 42.991 | 37.102 | 46.685 | 31.053 | 5.217 | 24.591 | 5.856 |
| 12/22/2004 12:00 | 30.96 | 43.008 | 37.1 | 46.692 | 31.061 | 5.226 | 24.593 | 5.853 |
| 12/22/2004 16:00 | 30.975 | 42.953 | 37.082 | 46.692 | 31.047 | 5.217 | 24.593 | 5.836 |
| 12/22/2004 20:00 | 30.968 | 42.974 | 37.104 | 46.704 | 31.059 | 5.219 | 24.599 | 5.845 |
| 12/23/2004 0:00 | 30.973 | 42.98 | 37.11 | 46.734 | 31.062 | 5.215 | 24.6 | 5.847 |
| 12/23/2004 4:00 | 30.958 | 42.991 | 37.124 | 46.741 | 31.059 | 5.209 | 24.604 | 5.853 |
| 12/23/2004 8:00 | 30.988 | 43.019 | 37.136 | 46.725 | 31.073 | 5.239 | 24.611 | 5.86 |
| 12/23/2004 12:00 | 30.995 | 43.047 | 37.138 | 46.762 | 31.086 | 5.221 | 24.614 | 5.862 |
| 12/23/2004 16:00 | 30.993 | 43.017 | 37.124 | 46.727 | 31.077 | 5.221 | 24.616 | 5.851 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 12/23/2004 20:00 | 31.005 | 43.03 | 37.148 | 46.738 | 31.086 | 5.217 | 24.62 | 5.862 |
| 12/24/2004 0:00 | 30.998 | 43.021 | 37.138 | 46.764 | 31.086 | 5.217 | 24.62 | 5.855 |
| 12/24/2004 4:00 | 30.99 | 42.991 | 37.128 | 46.752 | 31.073 | 5.207 | 24.62 | 5.843 |
| 12/24/2004 8:00 | 30.98 | 42.951 | 37.108 | 46.725 | 31.06 | 5.194 | 24.616 | 5.828 |
| 12/24/2004 12:00 | 30.978 | 42.927 | 37.104 | 46.683 | 31.053 | 5.188 | 24.612 | 5.809 |
| 12/24/2004 16:00 | 30.953 | 42.846 | 37.068 | 46.676 | 31.023 | 5.202 | 24.599 | 5.791 |
| 12/24/2004 20:00 | 30.963 | 42.85 | 37.102 | 46.671 | 31.03 | 5.217 | 24.603 | 5.804 |
| 12/25/2004 0:00 | 30.963 | 42.852 | 37.098 | 46.634 | 31.032 | 5.192 | 24.605 | 5.804 |
| 12/25/2004 4:00 | 30.96 | 42.867 | 37.126 | 46.63 | 31.03 | 5.202 | 24.607 | 5.815 |
| 12/25/2004 8:00 | 30.963 | 42.886 | 37.13 | 46.66 | 31.034 | 5.211 | 24.611 | 5.813 |
| 12/25/2004 12:00 | 30.973 | 42.925 | 37.146 | 46.674 | 31.051 | 5.194 | 24.618 | 5.821 |
| 12/25/2004 16:00 | 30.973 | 42.921 | 37.142 | 46.664 | 31.053 | 5.196 | 24.618 | 5.819 |
| 12/25/2004 20:00 | 30.993 | 42.966 | 37.17 | 46.66 | 31.068 | 5.204 | 24.626 | 5.834 |
| 12/26/2004 0:00 | 31.01 | 43.023 | 37.188 | 46.688 | 31.09 | 5.21 | 24.634 | 5.847 |
| 12/26/2004 4:00 | 31 | 43.042 | 37.186 | 46.729 | 31.094 | 5.21 | 24.638 | 5.851 |
| 12/26/2004 8:00 | 31.02 | 43.068 | 37.204 | 46.75 | 31.103 | 5.2 | 24.643 | 5.859 |
| 12/26/2004 12:00 | 31.03 | 43.106 | 37.21 | 46.731 | 31.122 | 5.216 | 24.647 | 5.861 |
| 12/26/2004 16:00 | 31.038 | 43.068 | 37.19 | 46.762 | 31.114 | 5.225 | 24.647 | 5.851 |
| 12/26/2004 20:00 | 31.038 | 43.081 | 37.206 | 46.778 | 31.122 | 5.218 | 24.653 | 5.857 |
| 12/27/2004 0:00 | 31.02 | 43.092 | 37.212 | 46.782 | 31.129 | 5.216 | 24.649 | 5.859 |
| 12/27/2004 4:00 | 31.035 | 43.079 | 37.202 | 46.785 | 31.125 | 5.214 | 24.657 | 5.848 |
| 12/27/2004 8:00 | 31.033 | 43.053 | 37.208 | 46.746 | 31.114 | 5.225 | 24.657 | 5.846 |
| 12/27/2004 12:00 | 31.038 | 43.062 | 37.212 | 46.75 | 31.12 | 5.214 | 24.659 | 5.844 |
| 12/27/2004 16:00 | 31.03 | 43.032 | 37.202 | 46.766 | 31.111 | 5.218 | 24.655 | 5.836 |
| 12/27/2004 20:00 | 31.04 | 43.032 | 37.214 | 46.768 | 31.114 | 5.204 | 24.659 | 5.836 |
| 12/28/2004 0:00 | 31.043 | 43.04 | 37.224 | 46.746 | 31.122 | 5.205 | 24.663 | 5.84 |
| 12/28/2004 4:00 | 31.035 | 43.027 | 37.218 | 46.773 | 31.116 | 5.218 | 24.663 | 5.834 |
| 12/28/2004 8:00 | 31.025 | 43.012 | 37.216 | 46.759 | 31.107 | 5.205 | 24.661 | 5.825 |
| 12/28/2004 12:00 | 31.035 | 43.03 | 37.225 | 46.762 | 31.116 | 5.201 | 24.663 | 5.831 |
| 12/28/2004 16:00 | 31.033 | 43.008 | 37.22 | 46.738 | 31.111 | 5.191 | 24.663 | 5.825 |
| 12/28/2004 20:00 | 31.048 | 43.045 | 37.247 | 46.755 | 31.122 | 5.216 | 24.669 | 5.84 |
| 12/29/2004 0:00 | 31.053 | 43.079 | 37.255 | 46.769 | 31.135 | 5.205 | 24.673 | 5.848 |
| 12/29/2004 4:00 | 31.057 | 43.094 | 37.257 | 46.748 | 31.142 | 5.206 | 24.674 | 5.848 |
| 12/29/2004 8:00 | 31.055 | 43.092 | 37.259 | 46.782 | 31.137 | 5.199 | 24.676 | 5.848 |
| 12/29/2004 12:00 | 31.06 | 43.1 | 37.257 | 46.789 | 31.146 | 5.21 | 24.681 | 5.848 |
| 12/29/2004 16:00 | 31.05 | 43.047 | 37.241 | 46.773 | 31.133 | 5.197 | 24.677 | 5.829 |
| 12/29/2004 20:00 | 31.05 | 43.036 | 37.249 | 46.775 | 31.131 | 5.205 | 24.679 | 5.827 |
| 12/30/2004 0:00 | 31.043 | 43.015 | 37.241 | 46.752 | 31.127 | 5.212 | 24.677 | 5.818 |
| 12/30/2004 4:00 | 31.015 | 42.995 | 37.239 | 46.745 | 31.12 | 5.214 | 24.671 | 5.812 |
| 12/30/2004 8:00 | 31.023 | 42.966 | 37.231 | 46.731 | 31.105 | 5.195 | 24.669 | 5.805 |
| 12/30/2004 12:00 | 31.038 | 42.98 | 37.239 | 46.692 | 31.109 | 5.206 | 24.673 | 5.81 |
| 12/30/2004 16:00 | 31.043 | 42.995 | 37.261 | 46.72 | 31.118 | 5.21 | 24.675 | 5.814 |
| 12/30/2004 20:00 | 31.057 | 43.042 | 37.281 | 46.738 | 31.133 | 5.193 | 24.683 | 5.829 |
| 12/31/2004 0:00 | 31.067 | 43.072 | 37.283 | 46.752 | 31.144 | 5.199 | 24.686 | 5.835 |
| 12/31/2004 4:00 | 31.077 | 43.113 | 37.307 | 46.75 | 31.157 | 5.215 | 24.692 | 5.85 |
| 12/31/2004 8:00 | 31.075 | 43.149 | 37.315 | 46.762 | 31.17 | 5.222 | 24.696 | 5.856 |
| 12/31/2004 12:00 | 31.097 | 43.192 | 37.325 | 46.812 | 31.187 | 5.224 | 24.702 | 5.867 |
| 12/31/2004 16:00 | 31.092 | 43.171 | 37.307 | 46.81 | 31.189 | 5.215 | 24.702 | 5.856 |
| 12/31/2004 20:00 | 31.105 | 43.192 | 37.323 | 46.835 | 31.196 | 5.207 | 24.708 | 5.867 |
| 1/1/2005 0:00 | 31.107 | 43.194 | 37.325 | 46.842 | 31.2 | 5.23 | 24.71 | 5.865 |
| 1/1/2005 4:00 | 31.082 | 43.177 | 37.323 | 46.808 | 31.198 | 5.222 | 24.706 | 5.858 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 1/1/2005 8:00 | 31.097 | 43.153 | 37.319 | 46.833 | 31.191 | 5.215 | 24.71 | 5.85 |
| 1/1/2005 12:00 | 31.1 | 43.149 | 37.319 | 46.835 | 31.189 | 5.186 | 24.712 | 5.845 |
| 1/1/2005 16:00 | 31.092 | 43.104 | 37.313 | 46.824 | 31.181 | 5.182 | 24.708 | 5.833 |
| 1/1/2005 20:00 | 31.097 | 43.13 | 37.339 | 46.831 | 31.189 | 5.211 | 24.714 | 5.845 |
| 1/2/2005 0:00 | 31.115 | 43.196 | 37.375 | 46.859 | 31.209 | 5.222 | 24.719 | 5.871 |
| 1/2/2005 4:00 | 31.122 | 43.23 | 37.375 | 46.87 | 31.224 | 5.236 | 24.725 | 5.877 |
| 1/2/2005 8:00 | 31.125 | 43.243 | 37.369 | 46.882 | 31.23 | 5.236 | 24.729 | 5.877 |
| 1/2/2005 12:00 | 31.125 | 43.252 | 37.369 | 46.857 | 31.23 | 5.223 | 24.727 | 5.877 |
| 1/2/2005 16:00 | 31.13 | 43.22 | 37.371 | 46.891 | 31.23 | 5.235 | 24.731 | 5.871 |
| 1/2/2005 20:00 | 31.14 | 43.23 | 37.381 | 46.898 | 31.232 | 5.244 | 24.735 | 5.873 |
| 1/3/2005 0:00 | 31.134 | 43.228 | 37.379 | 46.902 | 31.235 | 5.227 | 24.735 | 5.871 |
| 1/3/2005 4:00 | 31.137 | 43.215 | 37.383 | 46.898 | 31.228 | 5.227 | 24.735 | 5.864 |
| 1/3/2005 8:00 | 31.122 | 43.203 | 37.397 | 46.9 | 31.183 | 5.211 | 24.733 | 5.864 |
| 1/3/2005 12:00 | 31.108 | 43.207 | 37.399 | 46.877 | 31.181 | 5.223 | 24.692 | 5.868 |
| 1/3/2005 16:00 | 31.095 | 43.185 | 37.401 | 46.87 | 31.174 | 5.231 | 24.69 | 5.868 |
| 1/3/2005 20:00 | 31.11 | 43.211 | 37.415 | 46.912 | 31.181 | 5.219 | 24.7 | 5.879 |
| 1/4/2005 0:00 | 31.112 | 43.211 | 37.417 | 46.891 | 31.183 | 5.209 | 24.706 | 5.881 |
| 1/4/2005 4:00 | 31.112 | 43.207 | 37.415 | 46.893 | 31.183 | 5.233 | 24.712 | 5.879 |
| 1/4/2005 8:00 | 31.11 | 43.19 | 37.415 | 46.909 | 31.181 | 5.215 | 24.716 | 5.875 |
| 1/4/2005 12:00 | 31.115 | 43.2 | 37.42 | 46.921 | 31.185 | 5.215 | 24.726 | 5.873 |
| 1/4/2005 16:00 | 31.103 | 43.141 | 37.405 | 46.879 | 31.172 | 5.225 | 24.723 | 5.86 |
| 1/4/2005 20:00 | 31.103 | 43.168 | 37.426 | 46.919 | 31.174 | 5.225 | 24.729 | 5.866 |
| 1/5/2005 0:00 | 31.11 | 43.177 | 37.438 | 46.893 | 31.176 | 5.237 | 24.735 | 5.868 |
| 1/5/2005 4:00 | 31.1 | 43.155 | 37.424 | 46.902 | 31.161 | 5.223 | 24.729 | 5.851 |
| 1/5/2005 8:00 | 31.105 | 43.16 | 37.434 | 46.909 | 31.17 | 5.208 | 24.735 | 5.859 |
| 1/5/2005 12:00 | 31.1 | 43.166 | 37.426 | 46.912 | 31.179 | 5.198 | 24.739 | 5.857 |
| 1/5/2005 16:00 | 31.095 | 43.132 | 37.417 | 46.891 | 31.166 | 5.196 | 24.735 | 5.84 |
| 1/5/2005 20:00 | 31.108 | 43.147 | 37.44 | 46.875 | 31.174 | 5.212 | 24.741 | 5.851 |
| 1/6/2005 0:00 | 31.108 | 43.16 | 37.45 | 46.884 | 31.179 | 5.186 | 24.743 | 5.853 |
| 1/6/2005 4:00 | 31.11 | 43.16 | 37.454 | 46.884 | 31.179 | 5.229 | 24.745 | 5.853 |
| 1/6/2005 8:00 | 31.117 | 43.171 | 37.456 | 46.912 | 31.185 | 5.219 | 24.747 | 5.853 |
| 1/6/2005 12:00 | 31.122 | 43.183 | 37.462 | 46.893 | 31.194 | 5.221 | 24.749 | 5.857 |
| 1/6/2005 16:00 | 31.127 | 43.155 | 37.452 | 46.905 | 31.187 | 5.214 | 24.749 | 5.847 |
| 1/6/2005 20:00 | 31.13 | 43.156 | 37.46 | 46.914 | 31.194 | 5.225 | 24.751 | 5.844 |
| 1/7/2005 0:00 | 31.135 | 43.162 | 37.474 | 46.886 | 31.198 | 5.225 | 24.753 | 5.849 |
| 1/7/2005 4:00 | 31.125 | 43.166 | 37.47 | 46.916 | 31.194 | 5.214 | 24.753 | 5.846 |
| 1/7/2005 8:00 | 31.125 | 43.17 | 37.478 | 46.891 | 31.201 | 5.221 | 24.755 | 5.849 |
| 1/7/2005 12:00 | 31.14 | 43.2 | 37.49 | 46.896 | 31.213 | 5.237 | 24.758 | 5.857 |
| 1/7/2005 16:00 | 31.137 | 43.198 | 37.494 | 46.898 | 31.216 | 5.22 | 24.76 | 5.857 |
| 1/7/2005 20:00 | 31.157 | 43.239 | 37.514 | 46.916 | 31.233 | 5.251 | 24.764 | 5.872 |
| 1/8/2005 0:00 | 31.165 | 43.271 | 37.524 | 46.963 | 31.25 | 5.243 | 24.768 | 5.882 |
| 1/8/2005 4:00 | 31.155 | 43.262 | 37.518 | 46.963 | 31.246 | 5.245 | 24.77 | 5.878 |
| 1/8/2005 8:00 | 31.16 | 43.267 | 37.516 | 46.963 | 31.248 | 5.237 | 24.77 | 5.874 |
| 1/8/2005 12:00 | 31.167 | 43.273 | 37.514 | 46.97 | 31.259 | 5.247 | 24.774 | 5.876 |
| 1/8/2005 16:00 | 31.15 | 43.217 | 37.5 | 46.958 | 31.241 | 5.247 | 24.77 | 5.857 |
| 1/8/2005 20:00 | 31.167 | 43.226 | 37.524 | 46.942 | 31.25 | 5.232 | 24.774 | 5.865 |
| 1/9/2005 0:00 | 31.162 | 43.219 | 37.514 | 46.967 | 31.25 | 5.239 | 24.776 | 5.856 |
| 1/9/2005 4:00 | 31.152 | 43.186 | 37.512 | 46.953 | 31.235 | 5.224 | 24.774 | 5.845 |
| 1/9/2005 8:00 | 31.142 | 43.164 | 37.504 | 46.933 | 31.224 | 5.239 | 24.771 | 5.837 |
| 1/9/2005 12:00 | 31.155 | 43.194 | 37.536 | 46.917 | 31.241 | 5.218 | 24.776 | 5.854 |
| 1/9/2005 16:00 | 31.175 | 43.226 | 37.562 | 46.933 | 31.248 | 5.237 | 24.782 | 5.871 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 1/9/2005 20:00 | 31.172 | 43.288 | 37.57 | 46.993 | 31.267 | 5.23 | 24.757 | 5.886 |
| 1/10/2005 0:00 | 31.177 | 43.311 | 37.572 | 46.97 | 31.285 | 5.233 | 24.741 | 5.89 |
| 1/10/2005 4:00 | 31.17 | 43.298 | 37.56 | 47 | 31.274 | 5.23 | 24.741 | 5.877 |
| 1/10/2005 8:00 | 31.157 | 43.243 | 37.542 | 46.956 | 31.252 | 5.274 | 24.74 | 5.86 |
| 1/10/2005 12:00 | 31.157 | 43.247 | 37.55 | 46.956 | 31.257 | 5.237 | 24.745 | 5.86 |
| 1/10/2005 16:00 | 31.14 | 43.194 | 37.542 | 46.939 | 31.239 | 5.226 | 24.745 | 5.845 |
| 1/10/2005 20:00 | 31.157 | 43.211 | 37.568 | 46.944 | 31.246 | 5.222 | 24.755 | 5.856 |
| 1/11/2005 0:00 | 31.16 | 43.232 | 37.566 | 46.981 | 31.259 | 5.234 | 24.763 | 5.858 |
| 1/11/2005 4:00 | 31.155 | 43.224 | 37.566 | 46.944 | 31.254 | 5.218 | 24.767 | 5.856 |
| 1/11/2005 8:00 | 31.152 | 43.23 | 37.576 | 46.976 | 31.253 | 5.199 | 24.774 | 5.856 |
| 1/11/2005 12:00 | 31.16 | 43.224 | 37.564 | 46.974 | 31.263 | 5.183 | 24.774 | 5.847 |
| 1/11/2005 16:00 | 31.14 | 43.181 | 37.55 | 46.958 | 31.25 | 5.189 | 24.772 | 5.832 |
| 1/11/2005 20:00 | 31.147 | 43.177 | 37.57 | 46.951 | 31.244 | 5.22 | 24.774 | 5.836 |
| 1/12/2005 0:00 | 31.142 | 43.162 | 37.556 | 46.935 | 31.246 | 5.199 | 24.774 | 5.828 |
| 1/12/2005 4:00 | 31.137 | 43.142 | 37.564 | 46.923 | 31.237 | 5.207 | 24.771 | 5.826 |
| 1/12/2005 8:00 | 31.122 | 43.138 | 37.558 | 46.879 | 31.226 | 5.203 | 24.771 | 5.817 |
| 1/12/2005 12:00 | 31.135 | 43.155 | 37.566 | 46.912 | 31.235 | 5.215 | 24.774 | 5.824 |
| 1/12/2005 16:00 | 31.145 | 43.181 | 37.594 | 46.923 | 31.248 | 5.203 | 24.78 | 5.838 |
| 1/12/2005 20:00 | 31.167 | 43.234 | 37.604 | 46.944 | 31.263 | 5.209 | 24.784 | 5.853 |
| 1/13/2005 0:00 | 31.175 | 43.271 | 37.612 | 46.944 | 31.282 | 5.22 | 24.788 | 5.86 |
| 1/13/2005 4:00 | 31.185 | 43.298 | 37.627 | 46.988 | 31.297 | 5.218 | 24.792 | 5.87 |
| 1/13/2005 8:00 | 31.195 | 43.347 | 37.649 | 46.99 | 31.31 | 5.255 | 24.8 | 5.891 |
| 1/13/2005 12:00 | 31.21 | 43.401 | 37.657 | 47.034 | 31.334 | 5.257 | 24.803 | 5.9 |
| 1/13/2005 16:00 | 31.21 | 43.401 | 37.651 | 47.016 | 31.341 | 5.263 | 24.807 | 5.906 |
| 1/13/2005 20:00 | 31.227 | 43.435 | 37.665 | 47.057 | 31.351 | 5.255 | 24.813 | 5.919 |
| 1/14/2005 0:00 | 31.237 | 43.465 | 37.671 | 47.048 | 31.371 | 5.257 | 24.817 | 5.929 |
| 1/14/2005 4:00 | 31.239 | 43.461 | 37.673 | 47.09 | 31.375 | 5.25 | 24.819 | 5.929 |
| 1/14/2005 8:00 | 31.244 | 43.446 | 37.667 | 47.095 | 31.371 | 5.236 | 24.821 | 5.923 |
| 1/14/2005 12:00 | 31.247 | 43.45 | 37.671 | 47.113 | 31.375 | 5.262 | 24.823 | 5.916 |
| 1/14/2005 16:00 | 31.249 | 43.412 | 37.667 | 47.12 | 31.368 | 5.252 | 24.825 | 5.909 |
| 1/14/2005 20:00 | 31.252 | 43.431 | 37.687 | 47.113 | 31.373 | 5.25 | 24.829 | 5.926 |
| 1/15/2005 0:00 | 31.254 | 43.448 | 37.691 | 47.145 | 31.381 | 5.281 | 24.831 | 5.928 |
| 1/15/2005 4:00 | 31.257 | 43.446 | 37.689 | 47.15 | 31.388 | 5.277 | 24.833 | 5.928 |
| 1/15/2005 8:00 | 31.254 | 43.437 | 37.689 | 47.159 | 31.384 | 5.281 | 24.837 | 5.924 |
| 1/15/2005 12:00 | 31.264 | 43.441 | 37.693 | 47.187 | 31.384 | 5.279 | 24.835 | 5.911 |
| 1/15/2005 16:00 | 31.264 | 43.401 | 37.681 | 47.159 | 31.375 | 5.269 | 24.835 | 5.903 |
| 1/15/2005 20:00 | 31.252 | 43.407 | 37.705 | 47.222 | 31.38 | 5.275 | 24.833 | 5.924 |
| 1/16/2005 0:00 | 31.264 | 43.42 | 37.713 | 47.134 | 31.384 | 5.267 | 24.841 | 5.924 |
| 1/16/2005 4:00 | 31.264 | 43.424 | 37.713 | 47.113 | 31.388 | 5.25 | 24.843 | 5.921 |
| 1/16/2005 8:00 | 31.264 | 43.422 | 37.713 | 47.138 | 31.386 | 5.287 | 24.843 | 5.92 |
| 1/16/2005 12:00 | 31.277 | 43.422 | 37.715 | 47.127 | 31.388 | 5.273 | 24.844 | 5.901 |
| 1/16/2005 16:00 | 31.259 | 43.386 | 37.703 | 47.108 | 31.379 | 5.283 | 24.844 | 5.892 |
| 1/16/2005 20:00 | 31.267 | 43.39 | 37.719 | 47.111 | 31.381 | 5.275 | 24.848 | 5.911 |
| 1/17/2005 0:00 | 31.264 | 43.397 | 37.727 | 47.108 | 31.381 | 5.265 | 24.848 | 5.913 |
| 1/17/2005 4:00 | 31.262 | 43.399 | 37.719 | 47.104 | 31.382 | 5.289 | 24.85 | 5.898 |
| 1/17/2005 8:00 | 31.264 | 43.406 | 37.733 | 47.078 | 31.388 | 5.279 | 24.852 | 5.902 |
| 1/17/2005 12:00 | 31.267 | 43.422 | 37.735 | 47.108 | 31.393 | 5.285 | 24.854 | 5.902 |
| 1/17/2005 16:00 | 31.267 | 43.397 | 37.727 | 47.102 | 31.388 | 5.265 | 24.852 | 5.896 |
| 1/17/2005 20:00 | 31.277 | 43.403 | 37.741 | 47.076 | 31.393 | 5.279 | 24.858 | 5.908 |
| 1/18/2005 0:00 | 31.267 | 43.407 | 37.733 | 47.106 | 31.388 | 5.269 | 24.858 | 5.904 |
| 1/18/2005 4:00 | 31.264 | 43.388 | 37.733 | 47.097 | 31.382 | 5.283 | 24.858 | 5.891 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 1/18/2005 8:00 | 31.257 | 43.358 | 37.733 | 47.064 | 31.371 | 5.266 | 24.856 | 5.883 |
| 1/18/2005 12:00 | 31.247 | 43.324 | 37.709 | 47.106 | 31.354 | 5.254 | 24.852 | 5.853 |
| 1/18/2005 16:00 | 31.239 | 43.256 | 37.703 | 47.106 | 31.332 | 5.248 | 24.844 | 5.842 |
| 1/18/2005 20:00 | 31.237 | 43.266 | 37.737 | 47.122 | 31.33 | 5.248 | 24.85 | 5.857 |
| 1/19/2005 0:00 | 31.234 | 43.288 | 37.737 | 47.099 | 31.33 | 5.239 | 24.854 | 5.865 |
| 1/19/2005 4:00 | 31.239 | 43.32 | 37.755 | 47.145 | 31.343 | 5.227 | 24.862 | 5.876 |
| 1/19/2005 8:00 | 31.252 | 43.352 | 37.757 | 47.15 | 31.352 | 5.229 | 24.864 | 5.88 |
| 1/19/2005 12:00 | 31.262 | 43.399 | 37.771 | 47.147 | 31.367 | 5.215 | 24.868 | 5.891 |
| 1/19/2005 16:00 | 31.262 | 43.371 | 37.749 | 47.145 | 31.358 | 5.237 | 24.868 | 5.878 |
| 1/19/2005 20:00 | 31.259 | 43.343 | 37.743 | 47.101 | 31.313 | 5.206 | 24.862 | 5.867 |
| 1/20/2005 0:00 | 31.239 | 43.305 | 37.735 | 47.113 | 31.285 | 5.206 | 24.856 | 5.857 |
| 1/20/2005 4:00 | 31.232 | 43.266 | 37.735 | 47.108 | 31.264 | 5.204 | 24.854 | 5.848 |
| 1/20/2005 8:00 | 31.227 | 43.262 | 37.761 | 47.085 | 31.261 | 5.217 | 24.858 | 5.854 |
| 1/20/2005 12:00 | 31.234 | 43.286 | 37.767 | 47.092 | 31.262 | 5.221 | 24.864 | 5.858 |
| 1/20/2005 16:00 | 31.202 | 43.26 | 37.761 | 47.085 | 31.408 | 4.526 | 24.765 | 5.551 |
| 1/20/2005 20:00 | 31.21 | 43.256 | 37.733 | 47.085 | 31.345 | 4.674 | 24.719 | 5.396 |
| 1/21/2005 0:00 | 31.188 | 43.256 | 37.671 | 47.078 | 31.352 | 4.909 | 24.748 | 5.472 |
| 1/21/2005 4:00 | 31.185 | 43.254 | 37.627 | 47.048 | 31.313 | 5.019 | 24.765 | 5.527 |
| 1/21/2005 8:00 | 31.183 | 43.243 | 37.633 | 47.05 | 31.289 | 5.078 | 24.777 | 5.57 |
| 1/21/2005 12:00 | 31.172 | 43.211 | 37.6 | 47.034 | 31.294 | 5.124 | 24.781 | 5.58 |
| 1/21/2005 16:00 | 31.158 | 43.155 | 37.592 | 47.064 | 31.289 | 5.142 | 24.785 | 5.596 |
| 1/21/2005 20:00 | 31.165 | 43.172 | 37.631 | 47.053 | 31.272 | 5.175 | 24.793 | 5.631 |
| 1/22/2005 0:00 | 31.155 | 43.202 | 37.665 | 47.087 | 31.272 | 5.186 | 24.8 | 5.664 |
| 1/22/2005 4:00 | 31.19 | 43.286 | 37.711 | 47.102 | 31.188 | 5.192 | 24.82 | 5.7 |
| 1/22/2005 8:00 | 31.21 | 43.35 | 37.727 | 47.102 | 31.048 | 5.198 | 24.833 | 5.734 |
| 1/22/2005 12:00 | 31.227 | 43.392 | 37.725 | 47.102 | 30.962 | 5.204 | 24.847 | 5.749 |
| 1/22/2005 16:00 | 31.232 | 43.39 | 37.717 | 47.071 | 30.934 | 5.202 | 24.853 | 5.764 |
| 1/22/2005 20:00 | 31.242 | 43.397 | 37.717 | 47.069 | 30.893 | 5.196 | 24.858 | 5.774 |
| 1/23/2005 0:00 | 31.247 | 43.39 | 37.721 | 47.069 | 30.87 | 5.202 | 24.864 | 5.781 |
| 1/23/2005 4:00 | 31.235 | 43.35 | 37.701 | 47.06 | 30.943 | 5.202 | 24.864 | 5.772 |
| 1/23/2005 8:00 | 31.225 | 43.315 | 37.699 | 47.085 | 31.027 | 5.208 | 24.864 | 5.776 |
| 1/23/2005 12:00 | 31.23 | 43.292 | 37.701 | 47.055 | 31.111 | 5.21 | 24.864 | 5.765 |
| 1/23/2005 16:00 | 31.188 | 43.219 | 37.669 | 47.074 | 31.335 | 5.206 | 24.856 | 5.753 |
| 1/23/2005 20:00 | 31.21 | 43.217 | 37.699 | 47.085 | 31.361 | 5.194 | 24.86 | 5.77 |
| 1/24/2005 0:00 | 31.205 | 43.204 | 37.683 | 47.043 | 31.449 | 5.179 | 24.86 | 5.761 |
| 1/24/2005 4:00 | 31.198 | 43.185 | 37.689 | 47.046 | 31.52 | 5.198 | 24.86 | 5.761 |
| 1/24/2005 8:00 | 31.198 | 43.194 | 37.705 | 47.08 | 31.527 | 5.193 | 24.862 | 5.774 |
| 1/24/2005 12:00 | 31.208 | 43.221 | 37.719 | 47.085 | 31.522 | 5.185 | 24.868 | 5.775 |
| 1/24/2005 16:00 | 31.2 | 43.204 | 37.711 | 47.083 | 31.6 | 5.2 | 24.864 | 5.774 |
| 1/24/2005 20:00 | 31.215 | 43.226 | 37.733 | 47.087 | 31.537 | 5.191 | 24.87 | 5.786 |
| 1/25/2005 0:00 | 31.205 | 43.224 | 37.723 | 47.08 | 31.561 | 5.173 | 24.872 | 5.78 |
| 1/25/2005 4:00 | 31.203 | 43.2 | 37.721 | 47.087 | 31.619 | 5.169 | 24.87 | 5.772 |
| 1/25/2005 8:00 | 31.2 | 43.192 | 37.725 | 47.09 | 31.66 | 5.191 | 24.87 | 5.774 |
| 1/25/2005 12:00 | 31.208 | 43.194 | 37.727 | 47.092 | 31.712 | 5.189 | 24.87 | 5.781 |
| 1/25/2005 16:00 | 31.203 | 43.179 | 37.731 | 47.067 | 31.768 | 5.185 | 24.87 | 5.775 |
| 1/25/2005 20:00 | 31.21 | 43.217 | 37.755 | 47.099 | 31.686 | 5.181 | 24.874 | 5.768 |
| 1/26/2005 0:00 | 31.225 | 43.277 | 37.751 | 47.11 | 31.546 | 5.189 | 24.88 | 5.785 |
| 1/26/2005 4:00 | 31.24 | 43.313 | 37.745 | 47.113 | 31.432 | 5.189 | 24.884 | 5.798 |
| 1/26/2005 8:00 | 31.245 | 43.339 | 37.745 | 47.087 | 31.346 | 5.196 | 24.886 | 5.807 |
| 1/26/2005 12:00 | 31.257 | 43.388 | 37.761 | 47.138 | 31.225 | 5.206 | 24.892 | 5.826 |
| 1/26/2005 16:00 | 31.27 | 43.38 | 37.743 | 47.122 | 31.221 | 5.206 | 24.894 | 5.824 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 1/26/2005 20:00 | 31.257 | 43.397 | 37.753 | 47.127 | 31.154 | 5.224 | 24.886 | 5.832 |
| 1/27/2005 0:00 | 31.285 | 43.414 | 37.757 | 47.136 | 31.111 | 5.202 | 24.899 | 5.84 |
| 1/27/2005 4:00 | 31.282 | 43.409 | 37.751 | 47.124 | 31.161 | 5.212 | 24.901 | 5.841 |
| 1/27/2005 8:00 | 31.285 | 43.409 | 37.753 | 47.122 | 31.088 | 5.202 | 24.903 | 5.844 |
| 1/27/2005 12:00 | 31.292 | 43.422 | 37.761 | 47.127 | 31.075 | 5.208 | 24.905 | 5.851 |
| 1/27/2005 16:00 | 31.287 | 43.392 | 37.741 | 47.106 | 31.148 | 5.196 | 24.905 | 5.84 |
| 1/27/2005 20:00 | 31.287 | 43.394 | 37.751 | 47.113 | 31.139 | 5.2 | 24.909 | 5.846 |
| 1/28/2005 0:00 | 31.287 | 43.39 | 37.747 | 47.106 | 31.176 | 5.177 | 24.909 | 5.844 |
| 1/28/2005 4:00 | 31.287 | 43.382 | 37.749 | 47.106 | 31.217 | 5.177 | 24.909 | 5.844 |
| 1/28/2005 8:00 | 31.282 | 43.377 | 37.751 | 47.074 | 31.249 | 5.197 | 24.911 | 5.844 |
| 1/28/2005 12:00 | 31.287 | 43.375 | 37.747 | 47.101 | 31.297 | 5.185 | 24.913 | 5.843 |
| 1/28/2005 16:00 | 31.277 | 43.337 | 37.729 | 47.062 | 31.404 | 5.169 | 24.909 | 5.828 |
| 1/28/2005 20:00 | 31.285 | 43.352 | 37.747 | 47.092 | 31.385 | 5.177 | 24.913 | 5.838 |
| 1/29/2005 0:00 | 31.287 | 43.365 | 37.751 | 47.074 | 31.383 | 5.17 | 24.915 | 5.842 |
| 1/29/2005 4:00 | 31.29 | 43.362 | 37.747 | 47.067 | 31.411 | 5.15 | 24.915 | 5.838 |
| 1/29/2005 8:00 | 31.29 | 43.367 | 37.755 | 47.071 | 31.413 | 5.17 | 24.917 | 5.842 |
| 1/29/2005 12:00 | 31.3 | 43.39 | 37.759 | 47.041 | 31.393 | 5.152 | 24.921 | 5.848 |
| 1/29/2005 16:00 | 31.295 | 43.39 | 37.755 | 47.12 | 31.417 | 5.131 | 24.921 | 5.848 |
| 1/29/2005 20:00 | 31.302 | 43.407 | 37.767 | 47.025 | 31.376 | 5.135 | 24.925 | 5.853 |
| 1/30/2005 0:00 | 31.305 | 43.418 | 37.765 | 46.983 | 31.359 | 5.144 | 24.925 | 5.853 |
| 1/30/2005 4:00 | 31.292 | 43.422 | 37.759 | 47.009 | 31.365 | 5.125 | 24.923 | 5.851 |
| 1/30/2005 8:00 | 31.31 | 43.422 | 37.763 | 47.002 | 31.363 | 5.131 | 24.929 | 5.851 |
| 1/30/2005 12:00 | 31.325 | 43.437 | 37.765 | 46.949 | 31.344 | 5.123 | 24.931 | 5.856 |
| 1/30/2005 16:00 | 31.315 | 43.412 | 37.753 | 47.085 | 31.43 | 5.125 | 24.93 | 5.843 |
| 1/30/2005 20:00 | 31.322 | 43.429 | 37.769 | 47.034 | 31.398 | 5.123 | 24.931 | 5.847 |
| 1/31/2005 0:00 | 31.322 | 43.437 | 37.769 | 46.988 | 31.376 | 5.119 | 24.935 | 5.849 |
| 1/31/2005 4:00 | 31.327 | 43.45 | 37.775 | 46.958 | 31.359 | 5.113 | 24.937 | 5.856 |
| 1/31/2005 8:00 | 31.332 | 43.459 | 37.781 | 46.928 | 31.329 | 5.115 | 24.939 | 5.86 |
| 1/31/2005 12:00 | 31.335 | 43.476 | 37.785 | 46.916 | 31.288 | 5.131 | 24.941 | 5.866 |
| 1/31/2005 16:00 | 31.335 | 43.463 | 37.773 | 46.956 | 31.333 | 5.129 | 24.942 | 5.858 |
| 1/31/2005 20:00 | 31.34 | 43.478 | 37.787 | 46.891 | 31.277 | 5.119 | 24.944 | 5.867 |
| 2/1/2005 0:00 | 31.344 | 43.482 | 37.785 | 46.898 | 31.26 | 5.121 | 24.946 | 5.865 |
| 2/1/2005 4:00 | 31.347 | 43.482 | 37.785 | 46.91 | 31.262 | 5.104 | 24.948 | 5.865 |
| 2/1/2005 8:00 | 31.344 | 43.484 | 37.789 | 46.882 | 31.264 | 5.104 | 24.95 | 5.869 |
| 2/1/2005 12:00 | 31.352 | 43.495 | 37.789 | 46.9 | 31.253 | 5.108 | 24.952 | 5.869 |
| 2/1/2005 16:00 | 31.354 | 43.482 | 37.787 | 46.984 | 31.293 | 5.119 | 24.952 | 5.867 |
| 2/1/2005 20:00 | 31.357 | 43.497 | 37.801 | 46.909 | 31.265 | 5.111 | 24.956 | 5.875 |
| 2/2/2005 0:00 | 31.354 | 43.491 | 37.791 | 46.94 | 31.279 | 5.09 | 24.956 | 5.866 |
| 2/2/2005 4:00 | 31.357 | 43.486 | 37.793 | 46.907 | 31.291 | 5.102 | 24.958 | 5.868 |
| 2/2/2005 8:00 | 31.357 | 43.491 | 37.798 | 46.939 | 31.303 | 5.094 | 24.96 | 5.87 |
| 2/2/2005 12:00 | 31.362 | 43.497 | 37.801 | 46.928 | 31.323 | 5.119 | 24.962 | 5.874 |
| 2/2/2005 16:00 | 31.354 | 43.465 | 37.788 | 47.113 | 31.418 | 5.102 | 24.96 | 5.859 |
| 2/2/2005 20:00 | 31.364 | 43.491 | 37.812 | 47.002 | 31.364 | 5.1 | 24.964 | 5.872 |
| 2/3/2005 0:00 | 31.365 | 43.497 | 37.812 | 46.961 | 31.351 | 5.1 | 24.966 | 5.869 |
| 2/3/2005 4:00 | 31.367 | 43.501 | 37.81 | 46.976 | 31.349 | 5.094 | 24.968 | 5.87 |
| 2/3/2005 8:00 | 31.369 | 43.508 | 37.82 | 46.97 | 31.344 | 5.094 | 24.972 | 5.874 |
| 2/3/2005 12:00 | 31.344 | 43.518 | 37.818 | 46.998 | 31.344 | 5.08 | 24.966 | 5.876 |
| 2/3/2005 16:00 | 31.359 | 43.497 | 37.81 | 47.134 | 31.424 | 5.076 | 24.972 | 5.865 |
| 2/3/2005 20:00 | 31.357 | 43.512 | 37.828 | 47.076 | 31.398 | 5.08 | 24.964 | 5.873 |
| 2/4/2005 0:00 | 31.38 | 43.516 | 37.824 | 47.004 | 31.374 | 5.104 | 24.975 | 5.873 |
| 2/4/2005 4:00 | 31.372 | 43.497 | 37.822 | 46.995 | 31.402 | 5.094 | 24.977 | 5.867 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 2/4/2005 8:00 | 31.375 | 43.508 | 37.834 | 46.977 | 31.398 | 5.096 | 24.979 | 5.873 |
| 2/4/2005 12:00 | 31.36 | 43.508 | 37.828 | 47.041 | 31.433 | 5.088 | 24.972 | 5.869 |
| 2/4/2005 16:00 | 31.38 | 43.476 | 37.82 | 47.219 | 31.521 | 5.086 | 24.978 | 5.859 |
| 2/4/2005 20:00 | 31.38 | 43.482 | 37.838 | 47.208 | 31.508 | 5.082 | 24.981 | 5.865 |
| 2/5/2005 0:00 | 31.382 | 43.482 | 37.838 | 47.166 | 31.508 | 5.061 | 24.982 | 5.862 |
| 2/5/2005 4:00 | 31.38 | 43.478 | 37.834 | 47.143 | 31.521 | 5.071 | 24.984 | 5.86 |
| 2/5/2005 8:00 | 31.38 | 43.474 | 37.834 | 47.184 | 31.538 | 5.069 | 24.984 | 5.858 |
| 2/5/2005 12:00 | 31.377 | 43.459 | 37.828 | 47.281 | 31.592 | 5.053 | 24.984 | 5.853 |
| 2/5/2005 16:00 | 31.345 | 43.424 | 37.83 | 47.062 | 31.566 | 5.152 | 24.98 | 5.844 |
| 2/5/2005 20:00 | 31.375 | 43.437 | 37.844 | 47.092 | 31.56 | 5.15 | 24.985 | 5.853 |
| 2/6/2005 0:00 | 31.38 | 43.45 | 37.846 | 47.064 | 31.56 | 5.135 | 24.987 | 5.856 |
| 2/6/2005 4:00 | 31.382 | 43.467 | 37.87 | 47.106 | 31.534 | 5.133 | 24.991 | 5.865 |
| 2/6/2005 8:00 | 31.36 | 43.456 | 37.858 | 47.074 | 31.448 | 5.125 | 24.923 | 5.851 |
| 2/6/2005 12:00 | 31.313 | 43.397 | 37.801 | 47.108 | 31.224 | 5.108 | 24.678 | 5.839 |
| 2/6/2005 16:00 | 31.238 | 43.283 | 37.741 | 47.099 | 31.086 | 5.091 | 24.401 | 5.819 |
| 2/6/2005 20:00 | 31.186 | 43.241 | 37.725 | 47.078 | 31.036 | 5.09 | 24.412 | 5.83 |
| 2/7/2005 0:00 | 31.144 | 43.202 | 37.695 | 47.115 | 30.92 | 5.073 | 24.447 | 5.832 |
| 2/7/2005 4:00 | 31.072 | 43.138 | 37.675 | 47.095 | 30.825 | 5.067 | 24.412 | 5.827 |
| 2/7/2005 8:00 | 31.044 | 43.089 | 37.665 | 47.104 | 30.744 | 5.063 | 24.43 | 5.83 |
| 2/7/2005 12:00 | 31.035 | 43.066 | 37.673 | 47.159 | 30.666 | 5.071 | 24.457 | 5.836 |
| 2/7/2005 16:00 | 31.01 | 42.997 | 37.665 | 47.104 | 30.675 | 5.055 | 24.476 | 5.821 |
| 2/7/2005 20:00 | 31.01 | 42.972 | 37.679 | 47.143 | 30.608 | 5.048 | 24.49 | 5.822 |
| 2/8/2005 0:00 | 30.997 | 42.94 | 37.687 | 47.147 | 30.572 | 5.065 | 24.501 | 5.815 |
| 2/8/2005 4:00 | 30.982 | 42.901 | 37.689 | 47.141 | 30.541 | 5.036 | 24.517 | 5.807 |
| 2/8/2005 8:00 | 30.975 | 42.865 | 37.705 | 47.106 | 30.528 | 5.026 | 24.53 | 5.805 |
| 2/8/2005 12:00 | 30.97 | 42.846 | 37.697 | 47.131 | 30.544 | 5.032 | 24.544 | 5.793 |
| 2/8/2005 16:00 | 30.945 | 42.784 | 37.677 | 47.11 | 30.612 | 5.024 | 24.55 | 5.774 |
| 2/8/2005 20:00 | 30.94 | 42.769 | 37.687 | 47.117 | 30.591 | 5.007 | 24.562 | 5.772 |
| 2/9/2005 0:00 | 30.943 | 42.762 | 37.683 | 47.083 | 30.602 | 5.016 | 24.57 | 5.767 |
| 2/9/2005 4:00 | 30.938 | 42.743 | 37.675 | 47.11 | 30.613 | 5.016 | 24.577 | 5.759 |
| 2/9/2005 8:00 | 30.943 | 42.732 | 37.685 | 47.115 | 30.587 | 5.011 | 24.587 | 5.759 |
| 2/9/2005 12:00 | 30.953 | 42.737 | 37.687 | 47.127 | 30.557 | 5.005 | 24.597 | 5.756 |
| 2/9/2005 16:00 | 30.948 | 42.694 | 37.675 | 47.083 | 30.608 | 5.017 | 24.6 | 5.744 |
| 2/9/2005 20:00 | 30.956 | 42.69 | 37.683 | 47.087 | 30.587 | 4.999 | 24.602 | 5.74 |
| 2/10/2005 0:00 | 30.953 | 42.683 | 37.679 | 47.12 | 30.595 | 4.995 | 24.602 | 5.736 |
| 2/10/2005 4:00 | 30.953 | 42.673 | 37.687 | 47.122 | 30.58 | 4.987 | 24.608 | 5.735 |
| 2/10/2005 8:00 | 30.958 | 42.69 | 37.699 | 47.117 | 30.524 | 4.991 | 24.62 | 5.741 |
| 2/10/2005 12:00 | 30.97 | 42.698 | 37.693 | 47.129 | 30.514 | 4.98 | 24.628 | 5.739 |
| 2/10/2005 16:00 | 30.958 | 42.658 | 37.673 | 47.09 | 30.594 | 4.97 | 24.622 | 5.719 |
| 2/10/2005 20:00 | 30.933 | 42.63 | 37.681 | 47.115 | 30.611 | 4.987 | 24.606 | 5.716 |
| 2/11/2005 0:00 | 30.923 | 42.621 | 37.687 | 47.087 | 30.615 | 4.995 | 24.602 | 5.716 |
| 2/11/2005 4:00 | 30.918 | 42.626 | 37.691 | 47.124 | 30.6 | 5.03 | 24.608 | 5.712 |
| 2/11/2005 8:00 | 30.913 | 42.621 | 37.695 | 47.099 | 30.579 | 5.028 | 24.614 | 5.712 |
| 2/11/2005 12:00 | 30.918 | 42.626 | 37.693 | 47.129 | 30.585 | 4.995 | 24.62 | 5.71 |
| 2/11/2005 16:00 | 30.893 | 42.568 | 37.657 | 47.099 | 30.688 | 5.03 | 24.604 | 5.687 |
| 2/11/2005 20:00 | 30.854 | 42.521 | 37.675 | 47.104 | 30.624 | 5.011 | 24.463 | 5.685 |
| 2/12/2005 0:00 | 30.829 | 42.491 | 37.665 | 47.064 | 30.648 | 5.017 | 24.467 | 5.673 |
| 2/12/2005 4:00 | 30.812 | 42.455 | 37.667 | 47.083 | 30.637 | 5.003 | 24.482 | 5.672 |
| 2/12/2005 8:00 | 30.789 | 42.425 | 37.671 | 47.094 | 30.589 | 4.99 | 24.496 | 5.667 |
| 2/12/2005 12:00 | 30.784 | 42.408 | 37.675 | 47.095 | 30.566 | 4.984 | 24.506 | 5.666 |
| 2/12/2005 16:00 | 30.732 | 42.331 | 37.637 | 47.055 | 30.432 | 4.98 | 24.478 | 5.64 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 2/12/2005 20:00 | 30.638 | 42.198 | 37.578 | 47.057 | 29.993 | 4.846 | 24.122 | 5.612 |
| 2/13/2005 0:00 | 30.509 | 42.036 | 37.504 | 47.083 | 29.686 | 4.704 | 23.865 | 5.561 |
| 2/13/2005 4:00 | 30.342 | 41.788 | 37.446 | 47.08 | 29.211 | 4.199 | 23.596 | 5.279 |
| 2/13/2005 8:00 | 30.151 | 41.585 | 37.419 | 47.083 | 29.06 | 3.878 | 23.396 | 5.219 |
| 2/13/2005 12:00 | 30.037 | 41.464 | 37.395 | 47.058 | 29.032 | 4.01 | 23.396 | 5.223 |
| 2/13/2005 16:00 | 29.956 | 41.374 | 37.377 | 47.067 | 28.987 | 4.214 | 23.451 | 5.238 |
| 2/13/2005 20:00 | 29.894 | 41.344 | 37.291 | 47.106 | 28.953 | 4.349 | 23.491 | 5.26 |
| 2/14/2005 0:00 | 29.845 | 41.304 | 37.09 | 47.106 | 28.924 | 4.471 | 23.532 | 5.266 |
| 2/14/2005 4:00 | 29.8 | 41.263 | 36.979 | 47.085 | 28.905 | 4.573 | 23.567 | 5.266 |
| 2/14/2005 8:00 | 29.761 | 41.216 | 36.887 | 47.09 | 28.886 | 4.624 | 23.6 | 5.26 |
| 2/14/2005 12:00 | 29.746 | 41.186 | 36.838 | 47.143 | 28.888 | 4.685 | 23.635 | 5.262 |
| 2/14/2005 16:00 | 29.712 | 41.109 | 36.75 | 47.115 | 28.903 | 4.706 | 23.65 | 5.242 |
| 2/14/2005 20:00 | 29.697 | 41.064 | 36.718 | 47.09 | 28.858 | 4.737 | 23.669 | 5.238 |
| 2/15/2005 0:00 | 29.692 | 41.037 | 36.678 | 47.127 | 28.86 | 4.773 | 23.691 | 5.232 |
| 2/15/2005 4:00 | 29.692 | 41.035 | 36.668 | 47.15 | 28.884 | 4.799 | 23.714 | 5.229 |
| 2/15/2005 8:00 | 29.689 | 41.026 | 36.652 | 47.127 | 28.902 | 4.805 | 23.733 | 5.225 |
| 2/15/2005 12:00 | 29.709 | 41.058 | 36.665 | 47.124 | 28.945 | 4.824 | 23.76 | 5.229 |
| 2/15/2005 16:00 | 29.732 | 41.049 | 36.66 | 47.155 | 28.975 | 4.811 | 23.778 | 5.222 |
| 2/15/2005 20:00 | 29.779 | 41.105 | 36.714 | 47.157 | 29.026 | 4.863 | 23.809 | 5.231 |
| 2/16/2005 0:00 | 29.799 | 41.118 | 36.704 | 47.127 | 29.065 | 4.877 | 23.829 | 5.225 |
| 2/16/2005 4:00 | 29.809 | 41.101 | 36.702 | 47.125 | 29.091 | 4.88 | 23.842 | 5.214 |
| 2/16/2005 8:00 | 29.818 | 41.092 | 36.732 | 47.152 | 29.111 | 4.873 | 23.858 | 5.21 |
| 2/16/2005 12:00 | 29.839 | 41.103 | 36.762 | 47.147 | 29.139 | 4.888 | 23.869 | 5.205 |
| 2/16/2005 16:00 | 29.833 | 41.041 | 36.732 | 47.097 | 29.145 | 4.896 | 23.869 | 5.188 |
| 2/16/2005 20:00 | 29.823 | 41.035 | 36.752 | 47.104 | 29.143 | 4.906 | 23.883 | 5.188 |
| 2/17/2005 0:00 | 29.848 | 41.052 | 36.764 | 47.108 | 29.167 | 4.909 | 23.894 | 5.188 |
| 2/17/2005 4:00 | 29.853 | 41.052 | 36.76 | 47.106 | 29.184 | 4.907 | 23.902 | 5.184 |
| 2/17/2005 8:00 | 29.861 | 41.032 | 36.754 | 47.104 | 29.195 | 4.904 | 23.908 | 5.179 |
| 2/17/2005 12:00 | 29.871 | 41.02 | 36.74 | 47.099 | 29.21 | 4.907 | 23.914 | 5.173 |
| 2/17/2005 16:00 | 29.871 | 40.975 | 36.718 | 47.09 | 29.189 | 4.933 | 23.912 | 5.166 |
| 2/17/2005 20:00 | 29.868 | 40.985 | 36.748 | 47.069 | 29.212 | 4.902 | 23.921 | 5.17 |
| 2/18/2005 0:00 | 29.89 | 41.005 | 36.746 | 47.099 | 29.234 | 4.911 | 23.931 | 5.172 |
| 2/18/2005 4:00 | 29.885 | 41.019 | 36.762 | 47.108 | 29.253 | 4.913 | 23.939 | 5.178 |
| 2/18/2005 8:00 | 29.942 | 41.077 | 36.772 | 47.12 | 29.303 | 4.911 | 23.96 | 5.188 |
| 2/18/2005 12:00 | 29.962 | 41.092 | 36.756 | 47.125 | 29.337 | 4.923 | 23.97 | 5.186 |
| 2/18/2005 16:00 | 29.953 | 41.037 | 36.714 | 47.069 | 29.333 | 4.921 | 23.966 | 5.169 |
| 2/18/2005 20:00 | 29.953 | 41.017 | 36.722 | 47.076 | 29.338 | 4.929 | 23.972 | 5.172 |
| 2/19/2005 0:00 | 29.955 | 41.009 | 36.716 | 47.097 | 29.344 | 4.939 | 23.975 | 5.166 |
| 2/19/2005 4:00 | 29.948 | 40.99 | 36.712 | 47.097 | 29.338 | 4.927 | 23.978 | 5.165 |
| 2/19/2005 8:00 | 29.93 | 40.958 | 36.697 | 47.085 | 29.335 | 4.923 | 23.977 | 5.159 |
| 2/19/2005 12:00 | 29.952 | 40.947 | 36.698 | 47.083 | 29.335 | 4.944 | 23.981 | 5.157 |
| 2/19/2005 16:00 | 29.925 | 40.887 | 36.663 | 47.043 | 29.31 | 4.88 | 23.972 | 5.144 |
| 2/19/2005 20:00 | 29.94 | 40.881 | 36.679 | 47.083 | 29.305 | 4.861 | 23.976 | 5.148 |
| 2/20/2005 0:00 | 29.945 | 40.872 | 36.677 | 47.048 | 29.305 | 4.89 | 23.978 | 5.146 |
| 2/20/2005 4:00 | 29.91 | 40.817 | 36.648 | 47.071 | 29.275 | 4.896 | 23.972 | 5.133 |
| 2/20/2005 8:00 | 29.92 | 40.795 | 36.665 | 47.046 | 29.256 | 4.923 | 23.972 | 5.137 |
| 2/20/2005 12:00 | 29.955 | 40.861 | 36.71 | 47.055 | 29.292 | 4.913 | 23.989 | 5.156 |
| 2/20/2005 16:00 | 29.979 | 40.917 | 36.734 | 47.083 | 29.329 | 4.941 | 24.003 | 5.164 |
| 2/20/2005 20:00 | 30.009 | 40.983 | 36.772 | 47.081 | 29.374 | 4.941 | 24.018 | 5.181 |
| 2/21/2005 0:00 | 30.027 | 41.028 | 36.768 | 47.087 | 29.417 | 4.941 | 24.03 | 5.183 |
| 2/21/2005 4:00 | 30.044 | 41.037 | 36.768 | 47.092 | 29.432 | 4.944 | 24.038 | 5.184 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 2/21/2005 8:00 | 30.061 | 41.064 | 36.786 | 47.09 | 29.458 | 4.952 | 24.047 | 5.191 |
| 2/21/2005 12:00 | 30.076 | 41.075 | 36.79 | 47.064 | 29.484 | 4.935 | 24.055 | 5.195 |
| 2/21/2005 16:00 | 30.081 | 41.06 | 36.77 | 47.088 | 29.488 | 4.942 | 24.057 | 5.185 |
| 2/21/2005 20:00 | 30.099 | 41.075 | 36.802 | 47.095 | 29.506 | 4.95 | 24.067 | 5.195 |
| 2/22/2005 0:00 | 30.123 | 41.122 | 36.816 | 47.078 | 29.54 | 4.958 | 24.078 | 5.202 |
| 2/22/2005 4:00 | 30.133 | 41.137 | 36.816 | 47.085 | 29.56 | 4.956 | 24.086 | 5.204 |
| 2/22/2005 8:00 | 30.163 | 41.19 | 36.838 | 47.081 | 29.596 | 4.942 | 24.1 | 5.215 |
| 2/22/2005 12:00 | 30.188 | 41.231 | 36.856 | 47.069 | 29.635 | 4.95 | 24.111 | 5.223 |
| 2/22/2005 16:00 | 30.18 | 41.199 | 36.824 | 47.092 | 29.639 | 4.946 | 24.113 | 5.214 |
| 2/22/2005 20:00 | 30.171 | 41.21 | 36.844 | 47.09 | 29.65 | 4.927 | 24.115 | 5.222 |
| 2/23/2005 0:00 | 30.203 | 41.214 | 36.838 | 47.09 | 29.67 | 4.966 | 24.127 | 5.22 |
| 2/23/2005 4:00 | 30.205 | 41.212 | 36.83 | 47.062 | 29.678 | 4.977 | 24.131 | 5.218 |
| 2/23/2005 8:00 | 30.21 | 41.201 | 36.838 | 47.09 | 29.683 | 4.96 | 24.137 | 5.218 |
| 2/23/2005 12:00 | 30.212 | 41.197 | 36.826 | 47.062 | 29.695 | 4.974 | 24.138 | 5.216 |
| 2/23/2005 16:00 | 30.215 | 41.163 | 36.814 | 47.085 | 29.693 | 4.968 | 24.137 | 5.209 |
| 2/23/2005 20:00 | 30.223 | 41.161 | 36.83 | 47.09 | 29.693 | 4.948 | 24.142 | 5.215 |
| 2/24/2005 0:00 | 30.227 | 41.175 | 36.832 | 47.053 | 29.711 | 4.944 | 24.149 | 5.217 |
| 2/24/2005 4:00 | 30.223 | 41.158 | 36.822 | 47.053 | 29.711 | 4.956 | 24.15 | 5.213 |
| 2/24/2005 8:00 | 30.23 | 41.152 | 36.83 | 47.09 | 29.713 | 4.964 | 24.154 | 5.217 |
| 2/24/2005 12:00 | 30.25 | 41.214 | 36.86 | 47.065 | 29.745 | 4.972 | 24.166 | 5.231 |
| 2/24/2005 16:00 | 30.25 | 41.21 | 36.83 | 47.055 | 29.76 | 4.962 | 24.17 | 5.221 |
| 2/24/2005 20:00 | 30.262 | 41.212 | 36.842 | 47.085 | 29.773 | 4.937 | 24.173 | 5.227 |
| 2/25/2005 0:00 | 30.272 | 41.218 | 36.844 | 47.048 | 29.784 | 4.919 | 24.177 | 5.227 |
| 2/25/2005 4:00 | 30.267 | 41.195 | 36.828 | 47.041 | 29.779 | 4.919 | 24.177 | 5.222 |
| 2/25/2005 8:00 | 30.264 | 41.175 | 36.836 | 47.044 | 29.773 | 4.913 | 24.179 | 5.222 |
| 2/25/2005 12:00 | 30.287 | 41.222 | 36.862 | 47.05 | 29.805 | 4.919 | 24.189 | 5.232 |
| 2/25/2005 16:00 | 30.289 | 41.218 | 36.848 | 47.071 | 29.917 | 4.917 | 24.191 | 5.226 |
| 2/25/2005 20:00 | 30.299 | 41.243 | 36.876 | 47.053 | 29.829 | 4.919 | 24.201 | 5.235 |
| 2/26/2005 0:00 | 30.322 | 41.284 | 36.881 | 47.078 | 29.887 | 4.929 | 24.207 | 5.243 |
| 2/26/2005 4:00 | 30.329 | 41.301 | 36.884 | 47.05 | 29.924 | 4.935 | 24.214 | 5.245 |
| 2/26/2005 8:00 | 30.339 | 41.316 | 36.886 | 47.05 | 29.948 | 4.939 | 24.22 | 5.245 |
| 2/26/2005 12:00 | 30.356 | 41.322 | 36.884 | 47.078 | 29.974 | 4.95 | 24.224 | 5.245 |
| 2/26/2005 16:00 | 30.349 | 41.284 | 36.866 | 47.048 | 29.971 | 4.94 | 24.222 | 5.234 |
| 2/26/2005 20:00 | 30.356 | 41.278 | 36.882 | 47.08 | 29.95 | 4.952 | 24.226 | 5.238 |
| 2/27/2005 0:00 | 30.367 | 41.286 | 36.886 | 47.051 | 29.952 | 4.983 | 24.23 | 5.238 |
| 2/27/2005 4:00 | 30.371 | 41.28 | 36.882 | 47.081 | 29.952 | 5 | 24.232 | 5.236 |
| 2/27/2005 8:00 | 30.372 | 41.276 | 36.888 | 47.083 | 29.952 | 5.014 | 24.236 | 5.238 |
| 2/27/2005 12:00 | 30.391 | 41.297 | 36.903 | 47.088 | 29.967 | 5.033 | 24.243 | 5.245 |
| 2/27/2005 16:00 | 30.386 | 41.295 | 36.897 | 47.083 | 29.971 | 5.026 | 24.245 | 5.24 |
| 2/27/2005 20:00 | 30.401 | 41.333 | 36.935 | 47.095 | 29.989 | 5.022 | 24.255 | 5.255 |
| 2/28/2005 0:00 | 30.418 | 41.378 | 36.935 | 47.062 | 30.019 | 5.039 | 24.265 | 5.259 |
| 2/28/2005 4:00 | 30.421 | 41.372 | 36.925 | 47.071 | 30.025 | 5.055 | 24.269 | 5.257 |
| 2/28/2005 8:00 | 30.429 | 41.389 | 36.949 | 47.083 | 30.036 | 5.053 | 24.274 | 5.265 |
| 2/28/2005 12:00 | 30.441 | 41.417 | 36.961 | 47.085 | 30.062 | 5.057 | 24.282 | 5.272 |
| 2/28/2005 16:00 | 30.428 | 41.427 | 36.959 | 47.083 | 30.081 | 5.06 | 24.284 | 5.272 |
| 2/28/2005 20:00 | 30.463 | 41.459 | 36.985 | 47.087 | 30.09 | 5.043 | 24.296 | 5.278 |
| 3/1/2005 0:00 | 30.475 | 41.477 | 36.983 | 47.048 | 30.105 | 5.027 | 24.302 | 5.28 |
| 3/1/2005 4:00 | 30.483 | 41.496 | 36.981 | 47.085 | 30.124 | 5.033 | 24.307 | 5.279 |
| 3/1/2005 8:00 | 30.495 | 41.521 | 37.003 | 47.097 | 30.139 | 5.051 | 24.317 | 5.286 |
| 3/1/2005 12:00 | 30.51 | 41.556 | 37.009 | 47.094 | 30.166 | 5.062 | 24.325 | 5.292 |
| 3/1/2005 16:00 | 30.505 | 41.517 | 36.979 | 47.044 | 30.163 | 5.035 | 24.323 | 5.279 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 3/1/2005 20:00 | 30.503 | 41.521 | 37.007 | 47.055 | 30.168 | 5.037 | 24.329 | 5.288 |
| 3/2/2005 0:00 | 30.51 | 41.528 | 37.003 | 47.046 | 30.172 | 5.041 | 24.332 | 5.286 |
| 3/2/2005 4:00 | 30.513 | 41.528 | 37.001 | 47.076 | 30.179 | 5.033 | 24.338 | 5.285 |
| 3/2/2005 8:00 | 30.5 | 41.513 | 37.005 | 47.074 | 30.174 | 5.022 | 24.34 | 5.285 |
| 3/2/2005 12:00 | 30.52 | 41.526 | 37.009 | 47.069 | 30.187 | 5.026 | 24.344 | 5.285 |
| 3/2/2005 16:00 | 30.513 | 41.504 | 37.003 | 47.074 | 30.187 | 5.018 | 24.346 | 5.283 |
| 3/2/2005 20:00 | 30.528 | 41.536 | 37.035 | 47.088 | 30.204 | 5.02 | 24.354 | 5.291 |
| 3/3/2005 0:00 | 30.54 | 41.568 | 37.039 | 47.078 | 30.215 | 4.996 | 24.36 | 5.296 |
| 3/3/2005 4:00 | 30.545 | 41.585 | 37.041 | 47.076 | 30.23 | 4.987 | 24.366 | 5.298 |
| 3/3/2005 8:00 | 30.557 | 41.607 | 37.053 | 47.074 | 30.243 | 4.989 | 24.374 | 5.301 |
| 3/3/2005 12:00 | 30.56 | 41.604 | 37.043 | 47.046 | 30.251 | 4.988 | 24.377 | 5.298 |
| 3/3/2005 16:00 | 30.55 | 41.562 | 37.023 | 47.069 | 30.243 | 4.963 | 24.374 | 5.288 |
| 3/3/2005 20:00 | 30.555 | 41.588 | 37.059 | 47.081 | 30.262 | 4.977 | 24.381 | 5.298 |
| 3/4/2005 0:00 | 30.562 | 41.613 | 37.063 | 47.048 | 30.269 | 4.982 | 24.387 | 5.3 |
| 3/4/2005 4:00 | 30.57 | 41.611 | 37.059 | 47.048 | 30.273 | 4.973 | 24.391 | 5.298 |
| 3/4/2005 8:00 | 30.58 | 41.622 | 37.071 | 47.085 | 30.284 | 4.977 | 24.397 | 5.305 |
| 3/4/2005 12:00 | 30.595 | 41.652 | 37.079 | 47.08 | 30.306 | 4.986 | 24.403 | 5.306 |
| 3/4/2005 16:00 | 30.592 | 41.641 | 37.077 | 47.058 | 30.31 | 4.973 | 24.405 | 5.307 |
| 3/4/2005 20:00 | 30.607 | 41.686 | 37.11 | 47.088 | 30.336 | 4.973 | 24.416 | 5.319 |
| 3/5/2005 0:00 | 30.624 | 41.746 | 37.126 | 47.088 | 30.366 | 4.986 | 24.428 | 5.328 |
| 3/5/2005 4:00 | 30.639 | 41.782 | 37.134 | 47.06 | 30.385 | 4.996 | 24.437 | 5.332 |
| 3/5/2005 8:00 | 30.659 | 41.831 | 37.154 | 47.09 | 30.415 | 4.998 | 24.447 | 5.342 |
| 3/5/2005 12:00 | 30.674 | 41.865 | 37.158 | 47.092 | 30.439 | 5.004 | 24.455 | 5.344 |
| 3/5/2005 16:00 | 30.659 | 41.816 | 37.126 | 47.053 | 30.443 | 5.01 | 24.453 | 5.33 |
| 3/5/2005 20:00 | 30.667 | 41.801 | 37.136 | 47.078 | 30.433 | 4.994 | 24.457 | 5.331 |
| 3/6/2005 0:00 | 30.669 | 41.79 | 37.136 | 47.053 | 30.433 | 4.98 | 24.461 | 5.327 |
| 3/6/2005 4:00 | 30.649 | 41.763 | 37.124 | 47.088 | 30.42 | 4.978 | 24.459 | 5.32 |
| 3/6/2005 8:00 | 30.657 | 41.746 | 37.126 | 47.081 | 30.418 | 4.992 | 24.461 | 5.321 |
| 3/6/2005 12:00 | 30.652 | 41.729 | 37.116 | 47.074 | 30.415 | 4.977 | 24.461 | 5.315 |
| 3/6/2005 16:00 | 30.629 | 41.632 | 37.075 | 47.062 | 30.377 | 4.953 | 24.445 | 5.295 |
| 3/6/2005 20:00 | 30.617 | 41.603 | 37.081 | 47.037 | 30.357 | 4.945 | 24.441 | 5.291 |
| 3/7/2005 0:00 | 30.622 | 41.611 | 37.1 | 47.051 | 30.357 | 4.955 | 24.447 | 5.301 |
| 3/7/2005 4:00 | 30.632 | 41.662 | 37.134 | 47.081 | 30.374 | 4.945 | 24.459 | 5.314 |
| 3/7/2005 8:00 | 30.644 | 41.728 | 37.158 | 47.083 | 30.409 | 4.959 | 24.466 | 5.327 |
| 3/7/2005 12:00 | 30.677 | 41.793 | 37.17 | 47.088 | 30.446 | 4.988 | 24.48 | 5.335 |
| 3/7/2005 16:00 | 30.682 | 41.818 | 37.174 | 47.053 | 30.463 | 4.978 | 24.486 | 5.337 |
| 3/7/2005 20:00 | 30.709 | 41.87 | 37.198 | 47.055 | 30.493 | 4.988 | 24.497 | 5.35 |
| 3/8/2005 0:00 | 30.721 | 41.902 | 37.198 | 47.085 | 30.517 | 4.992 | 24.505 | 5.351 |
| 3/8/2005 4:00 | 30.724 | 41.91 | 37.198 | 47.076 | 30.521 | 5.009 | 24.509 | 5.349 |
| 3/8/2005 8:00 | 30.734 | 41.923 | 37.208 | 47.081 | 30.534 | 4.99 | 24.515 | 5.354 |
| 3/8/2005 12:00 | 30.744 | 41.936 | 37.21 | 47.081 | 30.549 | 4.976 | 24.521 | 5.354 |
| 3/8/2005 16:00 | 30.744 | 41.934 | 37.218 | 47.058 | 30.551 | 4.98 | 24.527 | 5.356 |
| 3/8/2005 20:00 | 30.756 | 41.949 | 37.226 | 47.083 | 30.562 | 4.997 | 24.53 | 5.358 |
| 3/9/2005 0:00 | 30.766 | 41.967 | 37.228 | 47.076 | 30.577 | 4.982 | 24.536 | 5.36 |
| 3/9/2005 4:00 | 30.763 | 41.963 | 37.232 | 47.048 | 30.579 | 4.974 | 24.54 | 5.358 |
| 3/9/2005 8:00 | 30.781 | 42.008 | 37.26 | 47.053 | 30.596 | 4.985 | 24.55 | 5.373 |
| 3/9/2005 12:00 | 30.796 | 42.055 | 37.26 | 47.078 | 30.626 | 4.997 | 24.559 | 5.374 |
| 3/9/2005 16:00 | 30.768 | 42.014 | 37.24 | 47.053 | 30.611 | 4.981 | 24.552 | 5.362 |
| 3/9/2005 20:00 | 30.783 | 41.985 | 37.244 | 47.074 | 30.616 | 4.997 | 24.563 | 5.36 |
| 3/10/2005 0:00 | 30.783 | 41.967 | 37.238 | 47.069 | 30.611 | 4.992 | 24.561 | 5.355 |
| 3/10/2005 4:00 | 30.758 | 41.891 | 37.196 | 47.028 | 30.579 | 4.968 | 24.552 | 5.333 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 3/10/2005 8:00 | 30.761 | 41.914 | 37.25 | 47.046 | 30.583 | 4.961 | 24.561 | 5.352 |
| 3/10/2005 12:00 | 30.786 | 41.963 | 37.26 | 47.071 | 30.611 | 4.968 | 24.569 | 5.36 |
| 3/10/2005 16:00 | 30.776 | 41.942 | 37.25 | 47.076 | 30.607 | 4.943 | 24.569 | 5.354 |
| 3/10/2005 20:00 | 30.791 | 42.04 | 37.307 | 47.088 | 30.644 | 4.939 | 24.571 | 5.377 |
| 3/11/2005 0:00 | 30.823 | 42.083 | 37.299 | 47.081 | 30.672 | 4.957 | 24.591 | 5.379 |
| 3/11/2005 4:00 | 30.833 | 42.1 | 37.301 | 47.076 | 30.68 | 4.966 | 24.597 | 5.379 |
| 3/11/2005 8:00 | 30.833 | 42.1 | 37.301 | 47.074 | 30.682 | 4.963 | 24.6 | 5.38 |
| 3/11/2005 12:00 | 30.836 | 42.07 | 37.279 | 47.071 | 30.685 | 4.97 | 24.6 | 5.368 |
| 3/11/2005 16:00 | 30.821 | 41.991 | 37.254 | 47.065 | 30.659 | 4.943 | 24.593 | 5.349 |
| 3/11/2005 20:00 | 30.806 | 41.938 | 37.25 | 47.065 | 30.629 | 4.933 | 24.587 | 5.34 |
| 3/12/2005 0:00 | 30.818 | 41.974 | 37.293 | 47.076 | 30.644 | 4.935 | 24.597 | 5.357 |
| 3/12/2005 4:00 | 30.813 | 41.974 | 37.279 | 47.071 | 30.646 | 4.931 | 24.602 | 5.352 |
| 3/12/2005 8:00 | 30.801 | 41.957 | 37.274 | 47.071 | 30.639 | 4.932 | 24.6 | 5.348 |
| 3/12/2005 12:00 | 30.831 | 42.019 | 37.321 | 47.083 | 30.689 | 4.941 | 24.61 | 5.365 |
| 3/12/2005 16:00 | 30.851 | 42.1 | 37.355 | 47.092 | 30.708 | 4.936 | 24.624 | 5.386 |
| 3/12/2005 20:00 | 30.863 | 42.177 | 37.359 | 47.06 | 30.738 | 4.953 | 24.633 | 5.394 |
| 3/13/2005 0:00 | 30.885 | 42.211 | 37.353 | 47.085 | 30.762 | 4.941 | 24.643 | 5.396 |
| 3/13/2005 4:00 | 30.895 | 42.233 | 37.367 | 47.083 | 30.771 | 4.956 | 24.649 | 5.4 |
| 3/13/2005 8:00 | 30.908 | 42.273 | 37.387 | 47.085 | 30.794 | 4.964 | 24.659 | 5.41 |
| 3/13/2005 12:00 | 30.92 | 42.286 | 37.383 | 47.085 | 30.816 | 4.954 | 24.664 | 5.409 |
| 3/13/2005 16:00 | 30.918 | 42.251 | 37.373 | 47.046 | 30.82 | 4.968 | 24.664 | 5.399 |
| 3/13/2005 20:00 | 30.933 | 42.275 | 37.407 | 47.085 | 30.816 | 4.975 | 24.672 | 5.41 |
| 3/14/2005 0:00 | 30.935 | 42.303 | 37.407 | 47.051 | 30.835 | 4.968 | 24.68 | 5.414 |
| 3/14/2005 4:00 | 30.943 | 42.318 | 37.415 | 47.051 | 30.846 | 4.983 | 24.688 | 5.419 |
| 3/14/2005 8:00 | 30.947 | 42.335 | 37.427 | 47.051 | 30.857 | 4.975 | 24.693 | 5.424 |
| 3/14/2005 12:00 | 30.94 | 42.356 | 37.429 | 47.055 | 30.88 | 4.968 | 24.688 | 5.428 |
| 3/14/2005 16:00 | 30.95 | 42.32 | 37.417 | 47.071 | 30.87 | 4.961 | 24.699 | 5.418 |
| 3/14/2005 20:00 | 30.969 | 42.333 | 37.445 | 47.078 | 30.876 | 4.977 | 24.705 | 5.426 |
| 3/15/2005 0:00 | 30.969 | 42.348 | 37.447 | 47.076 | 30.887 | 4.969 | 24.711 | 5.428 |
| 3/15/2005 4:00 | 30.975 | 42.36 | 37.447 | 47.044 | 30.898 | 4.961 | 24.717 | 5.429 |
| 3/15/2005 8:00 | 30.974 | 42.367 | 37.461 | 47.044 | 30.902 | 4.952 | 24.722 | 5.433 |
| 3/15/2005 12:00 | 30.987 | 42.374 | 37.459 | 47.071 | 30.908 | 4.966 | 24.726 | 5.43 |
| 3/15/2005 16:00 | 30.985 | 42.339 | 37.449 | 47.067 | 30.904 | 4.952 | 24.726 | 5.422 |
| 3/15/2005 20:00 | 30.992 | 42.339 | 37.476 | 47.074 | 30.908 | 4.971 | 24.734 | 5.428 |
| 3/16/2005 0:00 | 30.995 | 42.369 | 37.484 | 47.074 | 30.917 | 4.967 | 24.738 | 5.434 |
| 3/16/2005 4:00 | 30.992 | 42.36 | 37.48 | 47.041 | 30.915 | 4.962 | 24.742 | 5.428 |
| 3/16/2005 8:00 | 31.002 | 42.373 | 37.496 | 47.074 | 30.924 | 4.983 | 24.748 | 5.434 |
| 3/16/2005 12:00 | 31.01 | 42.371 | 37.488 | 47.039 | 30.936 | 4.992 | 24.75 | 5.43 |
| 3/16/2005 16:00 | 31 | 42.335 | 37.48 | 47.065 | 30.924 | 4.992 | 24.75 | 5.421 |
| 3/16/2005 20:00 | 31 | 42.328 | 37.498 | 47.069 | 30.926 | 5.008 | 24.752 | 5.425 |
| 3/17/2005 0:00 | 31.002 | 42.339 | 37.502 | 47.067 | 30.926 | 4.987 | 24.755 | 5.422 |
| 3/17/2005 4:00 | 31.002 | 42.339 | 37.502 | 47.067 | 30.924 | 4.979 | 24.759 | 5.422 |
| 3/17/2005 8:00 | 31.002 | 42.333 | 37.508 | 47.069 | 30.924 | 5.002 | 24.761 | 5.421 |
| 3/17/2005 12:00 | 30.987 | 42.327 | 37.504 | 47.034 | 30.93 | 4.998 | 24.763 | 5.418 |
| 3/17/2005 16:00 | 31 | 42.286 | 37.496 | 47.037 | 30.932 | 4.978 | 24.761 | 5.412 |
| 3/17/2005 20:00 | 31.002 | 42.305 | 37.524 | 47.074 | 30.93 | 4.971 | 24.765 | 5.42 |
| 3/18/2005 0:00 | 31.01 | 42.324 | 37.524 | 47.071 | 30.932 | 4.971 | 24.769 | 5.421 |
| 3/18/2005 4:00 | 31.007 | 42.316 | 37.522 | 47.065 | 30.93 | 4.966 | 24.771 | 5.416 |
| 3/18/2005 8:00 | 31.012 | 42.328 | 37.54 | 47.071 | 30.936 | 4.974 | 24.775 | 5.424 |
| 3/18/2005 12:00 | 31.046 | 42.339 | 37.542 | 47.044 | 30.911 | 4.8 | 24.779 | 5.417 |
| 3/18/2005 16:00 | 31.051 | 42.367 | 37.568 | 47.108 | 30.936 | 4.793 | 24.788 | 5.419 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 3/18/2005 20:00 | 31.073 | 42.439 | 37.596 | 47.148 | 30.969 | 4.777 | 24.796 | 5.432 |
| 3/19/2005 0:00 | 31.081 | 42.463 | 37.586 | 47.136 | 30.98 | 4.768 | 24.802 | 5.433 |
| 3/19/2005 4:00 | 31.063 | 42.474 | 37.59 | 47.162 | 30.988 | 4.757 | 24.808 | 5.433 |
| 3/19/2005 8:00 | 31.095 | 42.51 | 37.614 | 47.138 | 31.007 | 4.767 | 24.819 | 5.446 |
| 3/19/2005 12:00 | 31.095 | 42.527 | 37.624 | 47.143 | 31.025 | 4.765 | 24.826 | 5.452 |
| 3/19/2005 16:00 | 31.106 | 42.512 | 37.608 | 47.102 | 31.031 | 4.775 | 24.827 | 5.439 |
| 3/19/2005 20:00 | 31.121 | 42.508 | 37.626 | 47.136 | 31.038 | 4.782 | 24.831 | 5.444 |
| 3/20/2005 0:00 | 31.118 | 42.516 | 37.634 | 47.115 | 31.042 | 4.781 | 24.837 | 5.448 |
| 3/20/2005 4:00 | 31.125 | 42.506 | 37.63 | 47.111 | 31.042 | 4.763 | 24.841 | 5.446 |
| 3/20/2005 8:00 | 31.13 | 42.525 | 37.638 | 47.113 | 31.055 | 4.759 | 24.846 | 5.453 |
| 3/20/2005 12:00 | 31.13 | 42.501 | 37.63 | 47.136 | 31.055 | 4.765 | 24.851 | 5.447 |
| 3/20/2005 16:00 | 31.123 | 42.444 | 37.616 | 47.115 | 31.038 | 4.749 | 24.848 | 5.432 |
| 3/20/2005 20:00 | 31.133 | 42.435 | 37.64 | 47.083 | 31.042 | 4.763 | 24.851 | 5.436 |
| 3/21/2005 0:00 | 31.123 | 42.444 | 37.644 | 47.115 | 31.046 | 4.737 | 24.856 | 5.439 |
| 3/21/2005 4:00 | 31.123 | 42.422 | 37.64 | 47.108 | 31.04 | 4.739 | 24.856 | 5.432 |
| 3/21/2005 8:00 | 31.133 | 42.418 | 37.658 | 47.081 | 31.044 | 4.734 | 24.86 | 5.438 |
| 3/21/2005 12:00 | 31.135 | 42.431 | 37.66 | 47.115 | 31.057 | 4.747 | 24.86 | 5.437 |
| 3/21/2005 16:00 | 31.143 | 42.405 | 37.664 | 47.106 | 31.126 | 4.727 | 24.866 | 5.435 |
| 3/21/2005 20:00 | 31.153 | 42.427 | 37.693 | 47.127 | 31.066 | 4.735 | 24.872 | 5.449 |
| 3/22/2005 0:00 | 31.147 | 42.448 | 37.691 | 47.146 | 31.07 | 4.731 | 24.878 | 5.451 |
| 3/22/2005 4:00 | 31.14 | 42.414 | 37.683 | 47.097 | 31.048 | 4.753 | 24.88 | 5.441 |
| 3/22/2005 8:00 | 31.153 | 42.401 | 37.699 | 47.134 | 31.042 | 4.771 | 24.881 | 5.448 |
| 3/22/2005 12:00 | 31.133 | 42.395 | 37.707 | 47.12 | 31.046 | 4.756 | 24.886 | 5.452 |
| 3/22/2005 16:00 | 31.145 | 42.375 | 37.709 | 47.145 | 31.001 | 4.74 | 24.884 | 5.452 |
| 3/22/2005 20:00 | 31.133 | 42.365 | 37.727 | 47.162 | 30.984 | 4.747 | 24.862 | 5.456 |
| 3/23/2005 0:00 | 31.138 | 42.345 | 37.729 | 47.178 | 30.96 | 4.731 | 24.853 | 5.462 |
| 3/23/2005 4:00 | 31.13 | 42.296 | 37.725 | 47.159 | 30.93 | 4.74 | 24.855 | 5.455 |
| 3/23/2005 8:00 | 31.138 | 42.281 | 37.749 | 47.175 | 30.928 | 4.737 | 24.864 | 5.465 |
| 3/23/2005 12:00 | 31.14 | 42.273 | 37.745 | 47.166 | 30.925 | 4.735 | 24.874 | 5.464 |
| 3/23/2005 16:00 | 31.138 | 42.215 | 37.747 | 47.12 | 30.902 | 4.736 | 24.876 | 5.455 |
| 3/23/2005 20:00 | 31.14 | 42.173 | 37.751 | 47.141 | 30.886 | 4.752 | 24.88 | 5.457 |
| 3/24/2005 0:00 | 31.14 | 42.162 | 37.769 | 47.155 | 30.884 | 4.744 | 24.887 | 5.461 |
| 3/24/2005 4:00 | 31.14 | 42.128 | 37.753 | 47.104 | 30.867 | 4.748 | 24.889 | 5.452 |
| 3/24/2005 8:00 | 31.135 | 42.102 | 37.771 | 47.138 | 30.855 | 4.731 | 24.893 | 5.456 |
| 3/24/2005 12:00 | 31.135 | 42.077 | 37.771 | 47.099 | 30.833 | 4.728 | 24.891 | 5.453 |
| 3/24/2005 16:00 | 31.128 | 42.023 | 37.769 | 47.115 | 30.801 | 4.731 | 24.886 | 5.447 |
| 3/24/2005 20:00 | 31.14 | 42.023 | 37.801 | 47.138 | 30.781 | 4.727 | 24.887 | 5.459 |
| 3/25/2005 0:00 | 31.14 | 42.025 | 37.803 | 47.127 | 30.781 | 4.729 | 24.897 | 5.463 |
| 3/25/2005 4:00 | 31.135 | 42.014 | 37.807 | 47.169 | 30.766 | 4.719 | 24.901 | 5.465 |
| 3/25/2005 8:00 | 31.121 | 42.023 | 37.825 | 47.143 | 30.764 | 4.724 | 24.905 | 5.473 |
| 3/25/2005 12:00 | 31.175 | 42.032 | 37.829 | 47.148 | 30.775 | 4.728 | 24.911 | 5.476 |
| 3/25/2005 16:00 | 31.15 | 42.006 | 37.827 | 47.145 | 30.762 | 4.746 | 24.913 | 5.472 |
| 3/25/2005 20:00 | 31.16 | 41.999 | 37.839 | 47.15 | 30.758 | 4.738 | 24.917 | 5.477 |
| 3/26/2005 0:00 | 31.157 | 41.997 | 37.843 | 47.152 | 30.764 | 4.746 | 24.922 | 5.479 |
| 3/26/2005 4:00 | 31.16 | 41.978 | 37.841 | 47.15 | 30.755 | 4.75 | 24.926 | 5.475 |
| 3/26/2005 8:00 | 31.165 | 41.974 | 37.855 | 47.125 | 30.755 | 4.75 | 24.93 | 5.48 |
| 3/26/2005 12:00 | 31.168 | 41.978 | 37.859 | 47.152 | 30.762 | 4.742 | 24.934 | 5.482 |
| 3/26/2005 16:00 | 31.16 | 41.936 | 37.851 | 47.138 | 30.753 | 4.744 | 24.934 | 5.474 |
| 3/26/2005 20:00 | 31.163 | 41.918 | 37.862 | 47.138 | 30.738 | 4.74 | 24.936 | 5.473 |
| 3/27/2005 0:00 | 31.163 | 41.897 | 37.86 | 47.136 | 30.734 | 4.72 | 24.928 | 5.471 |
| 3/27/2005 4:00 | 31.155 | 41.873 | 37.862 | 47.132 | 30.725 | 4.736 | 24.94 | 5.466 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 3/27/2005 8:00 | 31.163 | 41.865 | 37.876 | 47.139 | 30.714 | 4.726 | 24.942 | 5.471 |
| 3/27/2005 12:00 | 31.16 | 41.858 | 37.866 | 47.104 | 30.751 | 4.726 | 24.944 | 5.467 |
| 3/27/2005 16:00 | 31.145 | 41.793 | 37.853 | 47.12 | 30.693 | 4.715 | 24.938 | 5.447 |
| 3/27/2005 20:00 | 31.143 | 41.763 | 37.868 | 47.118 | 30.678 | 4.716 | 24.94 | 5.443 |
| 3/28/2005 0:00 | 31.135 | 41.767 | 37.876 | 47.086 | 30.678 | 4.714 | 24.942 | 5.445 |
| 3/28/2005 4:00 | 31.138 | 41.743 | 37.872 | 47.108 | 30.669 | 4.738 | 24.944 | 5.441 |
| 3/28/2005 8:00 | 31.143 | 41.715 | 37.88 | 47.106 | 30.66 | 4.735 | 24.944 | 5.439 |
| 3/28/2005 12:00 | 31.138 | 41.722 | 37.876 | 47.104 | 30.665 | 4.74 | 24.946 | 5.441 |
| 3/28/2005 16:00 | 31.138 | 41.69 | 37.874 | 47.099 | 30.645 | 4.726 | 24.944 | 5.43 |
| 3/28/2005 20:00 | 31.123 | 41.677 | 37.886 | 47.071 | 30.639 | 4.712 | 24.946 | 5.428 |
| 3/29/2005 0:00 | 31.14 | 41.685 | 37.89 | 47.102 | 30.641 | 4.73 | 24.949 | 5.434 |
| 3/29/2005 4:00 | 31.071 | 41.639 | 37.872 | 47.062 | 30.626 | 4.736 | 24.946 | 5.421 |
| 3/29/2005 8:00 | 31.116 | 41.615 | 37.892 | 47.069 | 30.613 | 4.72 | 24.946 | 5.424 |
| 3/29/2005 12:00 | 31.135 | 41.624 | 37.896 | 47.099 | 30.619 | 4.716 | 24.949 | 5.427 |
| 3/29/2005 16:00 | 31.13 | 41.617 | 37.892 | 47.069 | 30.626 | 4.716 | 24.951 | 5.422 |
| 3/29/2005 20:00 | 31.135 | 41.628 | 37.902 | 47.099 | 30.632 | 4.712 | 24.952 | 5.426 |
| 3/30/2005 0:00 | 31.133 | 41.626 | 37.904 | 47.102 | 30.622 | 4.71 | 24.954 | 5.425 |
| 3/30/2005 4:00 | 31.135 | 41.583 | 37.892 | 47.065 | 30.609 | 4.72 | 24.954 | 5.418 |
| 3/30/2005 8:00 | 31.133 | 41.559 | 37.9 | 47.097 | 30.598 | 4.717 | 24.954 | 5.418 |
| 3/30/2005 12:00 | 31.158 | 41.596 | 37.924 | 47.108 | 30.613 | 4.733 | 24.96 | 5.431 |
| 3/30/2005 16:00 | 31.185 | 41.7 | 37.958 | 47.18 | 30.665 | 4.745 | 24.971 | 5.46 |
| 3/30/2005 20:00 | 31.202 | 41.779 | 37.962 | 47.164 | 30.697 | 4.751 | 24.979 | 5.473 |
| 3/31/2005 0:00 | 31.217 | 41.816 | 37.954 | 47.175 | 30.719 | 4.748 | 24.985 | 5.482 |
| 3/31/2005 4:00 | 31.225 | 41.829 | 37.96 | 47.095 | 30.734 | 4.755 | 24.987 | 5.486 |
| 3/31/2005 8:00 | 31.23 | 41.855 | 37.972 | 47.076 | 30.753 | 4.764 | 24.994 | 5.495 |
| 3/31/2005 12:00 | 31.245 | 41.882 | 37.964 | 47.083 | 30.779 | 4.772 | 24.996 | 5.494 |
| 3/31/2005 16:00 | 31.25 | 41.833 | 37.948 | 47.108 | 30.787 | 4.768 | 24.998 | 5.486 |
| 3/31/2005 20:00 | 31.257 | 41.839 | 37.964 | 47.104 | 30.787 | 4.782 | 25.002 | 5.494 |
| 4/1/2005 0:00 | 31.255 | 41.863 | 37.972 | 47.138 | 30.79 | 4.774 | 25.006 | 5.497 |
| 4/1/2005 4:00 | 31.262 | 41.837 | 37.97 | 47.136 | 30.781 | 4.789 | 25.008 | 5.494 |
| 4/1/2005 8:00 | 31.267 | 41.856 | 37.98 | 47.164 | 30.79 | 4.798 | 25.01 | 5.499 |
| 4/1/2005 12:00 | 31.269 | 41.844 | 37.97 | 47.106 | 30.809 | 4.789 | 25.012 | 5.493 |
| 4/1/2005 16:00 | 31.264 | 41.782 | 37.958 | 47.113 | 30.781 | 4.783 | 25.01 | 5.481 |
| 4/1/2005 20:00 | 31.269 | 41.773 | 37.98 | 47.122 | 30.781 | 4.775 | 25.014 | 5.486 |
| 4/2/2005 0:00 | 31.262 | 41.779 | 37.986 | 47.134 | 30.775 | 4.787 | 25.016 | 5.49 |
| 4/2/2005 4:00 | 31.279 | 41.771 | 37.986 | 47.139 | 30.77 | 4.798 | 25.02 | 5.49 |
| 4/2/2005 8:00 | 31.277 | 41.782 | 37.996 | 47.125 | 30.775 | 4.797 | 25.021 | 5.497 |
| 4/2/2005 12:00 | 31.272 | 41.769 | 37.984 | 47.108 | 30.785 | 4.804 | 25.021 | 5.487 |
| 4/2/2005 16:00 | 31.269 | 41.705 | 37.968 | 47.106 | 30.76 | 4.792 | 25.02 | 5.475 |
| 4/2/2005 20:00 | 31.264 | 41.675 | 37.984 | 47.102 | 30.749 | 4.79 | 25.018 | 5.477 |
| 4/3/2005 0:00 | 31.275 | 41.668 | 37.992 | 47.072 | 30.736 | 4.8 | 25.023 | 5.477 |
| 4/3/2005 4:00 | 31.269 | 41.673 | 38.008 | 47.081 | 30.731 | 4.798 | 25.025 | 5.483 |
| 4/3/2005 8:00 | 31.28 | 41.66 | 38.002 | 47.106 | 30.729 | 4.798 | 25.027 | 5.48 |
| 4/3/2005 12:00 | 31.277 | 41.669 | 37.998 | 47.108 | 30.734 | 4.79 | 25.029 | 5.481 |
| 4/3/2005 16:00 | 31.277 | 41.626 | 37.99 | 47.095 | 30.716 | 4.829 | 25.027 | 5.469 |
| 4/3/2005 20:00 | 31.282 | 41.615 | 38.005 | 47.069 | 30.717 | 4.823 | 25.031 | 5.476 |
| 4/4/2005 0:00 | 31.275 | 41.626 | 38.014 | 47.074 | 30.717 | 4.809 | 25.033 | 5.479 |
| 4/4/2005 4:00 | 31.272 | 41.604 | 38.002 | 47.09 | 30.703 | 4.782 | 25.033 | 5.471 |
| 4/4/2005 8:00 | 31.24 | 41.604 | 38.017 | 47.099 | 30.717 | 4.79 | 25.035 | 5.477 |
| 4/4/2005 12:00 | 31.252 | 41.581 | 38.012 | 47.097 | 30.712 | 4.811 | 25.035 | 5.476 |
| 4/4/2005 16:00 | 31.28 | 41.568 | 38.005 | 47.09 | 30.786 | 4.8 | 25.033 | 5.466 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 4/4/2005 20:00 | 31.29 | 41.547 | 38.021 | 47.095 | 30.723 | 4.784 | 25.037 | 5.47 |
| 4/5/2005 0:00 | 31.29 | 41.577 | 38.029 | 47.102 | 30.715 | 4.786 | 25.039 | 5.477 |
| 4/5/2005 4:00 | 31.28 | 41.564 | 38.022 | 47.095 | 30.699 | 4.777 | 25.041 | 5.472 |
| 4/5/2005 8:00 | 31.3 | 41.581 | 38.04 | 47.104 | 30.71 | 4.792 | 25.045 | 5.482 |
| 4/5/2005 12:00 | 31.307 | 41.628 | 38.047 | 47.09 | 30.745 | 4.792 | 25.047 | 5.489 |
| 4/5/2005 16:00 | 31.319 | 41.645 | 38.043 | 47.127 | 30.749 | 4.784 | 25.043 | 5.489 |
| 4/5/2005 20:00 | 31.327 | 41.698 | 38.067 | 47.146 | 30.777 | 4.793 | 25.054 | 5.503 |
| 4/6/2005 0:00 | 31.324 | 41.713 | 38.045 | 47.178 | 30.786 | 4.824 | 25.054 | 5.497 |
| 4/6/2005 4:00 | 31.327 | 41.711 | 38.051 | 47.169 | 30.788 | 4.819 | 25.056 | 5.498 |
| 4/6/2005 8:00 | 31.243 | 41.671 | 38.032 | 47.118 | 30.343 | 4.763 | 24.822 | 5.471 |
| 4/6/2005 12:00 | 31.091 | 41.498 | 37.944 | 47.113 | 29.855 | 4.547 | 24.328 | 5.345 |
| 4/6/2005 16:00 | 30.9 | 41.34 | 37.874 | 47.118 | 29.711 | 4.457 | 24.164 | 5.213 |
| 4/6/2005 20:00 | 30.781 | 41.207 | 37.834 | 47.15 | 29.564 | 4.475 | 24.138 | 5.127 |
| 4/7/2005 0:00 | 30.662 | 41.111 | 37.807 | 47.123 | 29.439 | 4.49 | 24.119 | 5.052 |
| 4/7/2005 4:00 | 30.56 | 41.019 | 37.783 | 47.155 | 29.338 | 4.525 | 24.117 | 4.982 |
| 4/7/2005 8:00 | 30.491 | 40.966 | 37.773 | 47.157 | 29.282 | 4.59 | 24.125 | 4.924 |
| 4/7/2005 12:00 | 30.426 | 40.93 | 37.747 | 47.134 | 29.256 | 4.623 | 24.141 | 4.87 |
| 4/7/2005 16:00 | 30.344 | 40.84 | 37.689 | 47.111 | 29.205 | 4.632 | 24.139 | 4.804 |
| 4/7/2005 20:00 | 30.303 | 40.776 | 37.653 | 47.109 | 29.168 | 4.642 | 24.14 | 4.761 |
| 4/8/2005 0:00 | 30.273 | 40.752 | 37.604 | 47.141 | 29.164 | 4.648 | 24.146 | 4.726 |
| 4/8/2005 4:00 | 30.221 | 40.716 | 37.564 | 47.113 | 29.153 | 4.646 | 24.146 | 4.691 |
| 4/8/2005 8:00 | 30.206 | 40.692 | 37.548 | 47.143 | 29.153 | 4.63 | 24.143 | 4.667 |
| 4/8/2005 12:00 | 30.197 | 40.656 | 37.502 | 47.102 | 29.164 | 4.648 | 24.145 | 4.639 |
| 4/8/2005 16:00 | 30.156 | 40.577 | 37.46 | 47.122 | 29.136 | 4.645 | 24.131 | 4.606 |
| 4/8/2005 20:00 | 30.12 | 40.53 | 37.462 | 47.12 | 29.116 | 4.63 | 24.121 | 4.587 |
| 4/9/2005 0:00 | 30.13 | 40.539 | 37.494 | 47.134 | 29.131 | 4.626 | 24.125 | 4.582 |
| 4/9/2005 4:00 | 30.117 | 40.498 | 37.48 | 47.123 | 29.121 | 4.62 | 24.118 | 4.562 |
| 4/9/2005 8:00 | 30.085 | 40.494 | 37.472 | 47.093 | 29.13 | 4.622 | 24.116 | 4.55 |
| 4/9/2005 12:00 | 30.072 | 40.488 | 37.469 | 47.118 | 29.147 | 4.616 | 24.112 | 4.541 |
| 4/9/2005 16:00 | 30.065 | 40.455 | 37.454 | 47.106 | 29.149 | 4.62 | 24.11 | 4.529 |
| 4/9/2005 20:00 | 30.087 | 40.46 | 37.474 | 47.12 | 29.158 | 4.628 | 24.112 | 4.531 |
| 4/10/2005 0:00 | 30.095 | 40.496 | 37.48 | 47.148 | 29.186 | 4.624 | 24.121 | 4.535 |
| 4/10/2005 4:00 | 30.092 | 40.485 | 37.458 | 47.136 | 29.193 | 4.639 | 24.119 | 4.526 |
| 4/10/2005 8:00 | 30.105 | 40.526 | 37.49 | 47.178 | 29.221 | 4.632 | 24.129 | 4.539 |
| 4/10/2005 12:00 | 30.11 | 40.517 | 37.452 | 47.132 | 29.242 | 4.616 | 24.129 | 4.529 |
| 4/10/2005 16:00 | 30.095 | 40.49 | 37.441 | 47.136 | 29.24 | 4.62 | 24.125 | 4.525 |
| 4/10/2005 20:00 | 30.097 | 40.511 | 37.462 | 47.157 | 29.257 | 4.627 | 24.133 | 4.535 |
| 4/11/2005 0:00 | 30.095 | 40.526 | 37.455 | 47.136 | 29.251 | 4.623 | 24.121 | 4.535 |
| 4/11/2005 4:00 | 30.077 | 40.517 | 37.466 | 47.173 | 29.212 | 4.628 | 24.119 | 4.54 |
| 4/11/2005 8:00 | 30.07 | 40.488 | 37.454 | 47.169 | 29.158 | 4.612 | 24.114 | 4.544 |
| 4/11/2005 12:00 | 30.065 | 40.455 | 37.434 | 47.152 | 29.13 | 4.612 | 24.11 | 4.539 |
| 4/11/2005 16:00 | 30.02 | 40.402 | 37.419 | 47.12 | 29.1 | 4.61 | 24.108 | 4.533 |
| 4/11/2005 20:00 | 29.51 | 40.24 | 37.399 | 47.13 | 28.466 | 3.137 | 23.678 | 4.015 |
| 4/12/2005 0:00 | 29.086 | 40.09 | 37.329 | 47.15 | 28.275 | 3.284 | 23.165 | 3.603 |
| 4/12/2005 4:00 | 28.766 | 39.965 | 37.305 | 47.166 | 28.174 | 3.602 | 22.994 | 3.394 |
| 4/12/2005 8:00 | 28.54 | 39.879 | 37.281 | 47.15 | 28.096 | 3.845 | 22.88 | 3.247 |
| 4/12/2005 12:00 | 28.396 | 39.826 | 37.138 | 47.153 | 28.04 | 4.032 | 22.795 | 3.141 |
| 4/12/2005 16:00 | 28.306 | 39.757 | 37.003 | 47.12 | 27.997 | 4.166 | 22.729 | 3.055 |
| 4/12/2005 20:00 | 28.242 | 39.715 | 36.923 | 47.127 | 27.963 | 4.255 | 22.685 | 2.988 |
| 4/13/2005 0:00 | 28.2 | 39.685 | 36.856 | 47.16 | 27.956 | 4.327 | 22.652 | 2.938 |
| 4/13/2005 4:00 | 28.175 | 39.661 | 36.796 | 47.169 | 27.96 | 4.374 | 22.629 | 2.897 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 4/13/2005 8:00 | 28.19 | 39.672 | 36.766 | 47.153 | 27.975 | 4.39 | 22.621 | 2.873 |
| 4/13/2005 12:00 | 28.153 | 39.678 | 36.726 | 47.095 | 28.006 | 4.4 | 22.619 | 2.85 |
| 4/13/2005 16:00 | 28.198 | 39.64 | 36.671 | 47.093 | 28.014 | 4.434 | 22.61 | 2.832 |
| 4/13/2005 20:00 | 28.207 | 39.633 | 36.668 | 47.097 | 28.036 | 4.44 | 22.61 | 2.824 |
| 4/14/2005 0:00 | 28.222 | 39.646 | 36.668 | 47.106 | 28.053 | 4.446 | 22.619 | 2.824 |
| 4/14/2005 4:00 | 28.252 | 39.631 | 36.648 | 47.079 | 28.075 | 4.435 | 22.621 | 2.824 |
| 4/14/2005 8:00 | 28.274 | 39.627 | 36.637 | 47.113 | 28.092 | 4.44 | 22.627 | 2.827 |
| 4/14/2005 12:00 | 28.274 | 39.608 | 36.599 | 47.111 | 28.116 | 4.467 | 22.627 | 2.824 |
| 4/14/2005 16:00 | 28.264 | 39.548 | 36.573 | 47.069 | 28.112 | 4.477 | 22.617 | 2.819 |
| 4/14/2005 20:00 | 28.284 | 39.527 | 36.597 | 47.111 | 28.112 | 4.497 | 22.619 | 2.832 |
| 4/15/2005 0:00 | 28.282 | 39.55 | 36.645 | 47.116 | 28.129 | 4.495 | 22.629 | 2.849 |
| 4/15/2005 4:00 | 28.336 | 39.559 | 36.667 | 47.113 | 28.151 | 4.494 | 22.643 | 2.866 |
| 4/15/2005 8:00 | 28.373 | 39.578 | 36.678 | 47.155 | 28.185 | 4.51 | 22.658 | 2.885 |
| 4/15/2005 12:00 | 28.386 | 39.578 | 36.661 | 47.148 | 28.211 | 4.506 | 22.664 | 2.896 |
| 4/15/2005 16:00 | 28.391 | 39.533 | 36.633 | 47.09 | 28.213 | 4.504 | 22.664 | 2.902 |
| 4/15/2005 20:00 | 28.408 | 39.533 | 36.646 | 47.102 | 28.224 | 4.521 | 22.672 | 2.923 |
| 4/16/2005 0:00 | 28.428 | 39.548 | 36.656 | 47.143 | 28.241 | 4.51 | 22.686 | 2.946 |
| 4/16/2005 4:00 | 28.458 | 39.559 | 36.655 | 47.125 | 28.256 | 4.519 | 22.697 | 2.965 |
| 4/16/2005 8:00 | 28.493 | 39.587 | 36.671 | 47.176 | 28.291 | 4.542 | 22.716 | 2.992 |
| 4/16/2005 12:00 | 28.502 | 39.589 | 36.649 | 47.166 | 28.3 | 4.54 | 22.713 | 3.005 |
| 4/16/2005 16:00 | 28.517 | 39.546 | 36.623 | 47.13 | 28.313 | 4.542 | 22.726 | 3.021 |
| 4/16/2005 20:00 | 28.542 | 39.546 | 36.637 | 47.104 | 28.317 | 4.548 | 22.735 | 3.044 |
| 4/17/2005 0:00 | 28.572 | 39.572 | 36.649 | 47.153 | 28.336 | 4.548 | 22.751 | 3.071 |
| 4/17/2005 4:00 | 28.582 | 39.565 | 36.631 | 47.139 | 28.345 | 4.543 | 22.761 | 3.087 |
| 4/17/2005 8:00 | 28.612 | 39.584 | 36.647 | 47.118 | 28.362 | 4.544 | 22.774 | 3.11 |
| 4/17/2005 12:00 | 28.614 | 39.569 | 36.623 | 47.127 | 28.373 | 4.552 | 22.775 | 3.126 |
| 4/17/2005 16:00 | 28.604 | 39.527 | 36.601 | 47.102 | 28.362 | 4.538 | 22.774 | 3.141 |
| 4/17/2005 20:00 | 28.629 | 39.512 | 36.605 | 47.069 | 28.371 | 4.544 | 22.78 | 3.166 |
| 4/18/2005 0:00 | 28.639 | 39.531 | 36.615 | 47.072 | 28.386 | 4.538 | 22.792 | 3.189 |
| 4/18/2005 4:00 | 28.644 | 39.525 | 36.605 | 47.069 | 28.39 | 4.554 | 22.8 | 3.208 |
| 4/18/2005 8:00 | 28.676 | 39.533 | 36.611 | 47.079 | 28.408 | 4.548 | 22.807 | 3.228 |
| 4/18/2005 12:00 | 28.681 | 39.535 | 36.599 | 47.102 | 28.425 | 4.542 | 22.815 | 3.246 |
| 4/18/2005 16:00 | 28.678 | 39.499 | 36.577 | 47.09 | 28.417 | 4.565 | 22.811 | 3.262 |
| 4/18/2005 20:00 | 28.698 | 39.488 | 36.579 | 47.09 | 28.429 | 4.561 | 22.813 | 3.278 |
| 4/19/2005 0:00 | 28.725 | 39.542 | 36.605 | 47.069 | 28.46 | 4.559 | 22.835 | 3.305 |
| 4/19/2005 4:00 | 28.735 | 39.522 | 36.583 | 47.095 | 28.455 | 4.561 | 22.837 | 3.318 |
| 4/19/2005 8:00 | 28.773 | 39.561 | 36.629 | 47.109 | 28.492 | 4.561 | 22.856 | 3.351 |
| 4/19/2005 12:00 | 28.792 | 39.587 | 36.627 | 47.106 | 28.518 | 4.569 | 22.868 | 3.37 |
| 4/19/2005 16:00 | 28.807 | 39.586 | 36.621 | 47.074 | 28.539 | 4.568 | 22.875 | 3.39 |
| 4/19/2005 20:00 | 28.845 | 39.618 | 36.641 | 47.081 | 28.578 | 4.574 | 22.888 | 3.42 |
| 4/20/2005 0:00 | 28.877 | 39.668 | 36.655 | 47.13 | 28.608 | 4.58 | 22.91 | 3.446 |
| 4/20/2005 4:00 | 28.892 | 39.676 | 36.649 | 47.13 | 28.623 | 4.582 | 22.921 | 3.463 |
| 4/20/2005 8:00 | 28.907 | 39.706 | 36.677 | 47.12 | 28.645 | 4.586 | 22.947 | 3.491 |
| 4/20/2005 12:00 | 28.936 | 39.719 | 36.659 | 47.139 | 28.677 | 4.586 | 22.951 | 3.506 |
| 4/20/2005 16:00 | 28.951 | 39.719 | 36.663 | 47.109 | 28.696 | 4.58 | 22.96 | 3.53 |
| 4/20/2005 20:00 | 28.964 | 39.734 | 36.672 | 47.106 | 28.716 | 4.588 | 22.972 | 3.555 |
| 4/21/2005 0:00 | 28.994 | 39.783 | 36.697 | 47.164 | 28.748 | 4.582 | 22.991 | 3.585 |
| 4/21/2005 4:00 | 28.959 | 39.749 | 36.671 | 47.141 | 28.597 | 4.553 | 22.96 | 3.582 |
| 4/21/2005 8:00 | 28.939 | 39.706 | 36.637 | 47.125 | 28.474 | 4.562 | 22.879 | 3.606 |
| 4/21/2005 12:00 | 28.909 | 39.665 | 36.641 | 47.16 | 28.429 | 4.578 | 22.895 | 3.62 |
| 4/21/2005 16:00 | 28.855 | 39.533 | 36.597 | 47.106 | 28.328 | 4.562 | 22.887 | 3.619 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 4/21/2005 20:00 | 28.872 | 39.518 | 36.645 | 47.097 | 28.289 | 4.566 | 22.908 | 3.642 |
| 4/22/2005 0:00 | 28.852 | 39.493 | 36.631 | 47.093 | 28.268 | 4.553 | 22.924 | 3.649 |
| 4/22/2005 4:00 | 28.827 | 39.428 | 36.621 | 47.111 | 28.229 | 4.55 | 22.926 | 3.657 |
| 4/22/2005 8:00 | 28.855 | 39.448 | 36.673 | 47.139 | 28.233 | 4.558 | 22.943 | 3.68 |
| 4/22/2005 12:00 | 28.909 | 39.548 | 36.728 | 47.148 | 28.298 | 4.559 | 22.99 | 3.709 |
| 4/22/2005 16:00 | 28.951 | 39.595 | 36.744 | 47.123 | 28.343 | 4.576 | 23.019 | 3.728 |
| 4/22/2005 20:00 | 28.976 | 39.629 | 36.75 | 47.12 | 28.378 | 4.579 | 23.042 | 3.75 |
| 4/23/2005 0:00 | 29.008 | 39.655 | 36.758 | 47.153 | 28.412 | 4.581 | 23.063 | 3.767 |
| 4/23/2005 4:00 | 29.013 | 39.655 | 36.76 | 47.153 | 28.427 | 4.601 | 23.079 | 3.784 |
| 4/23/2005 8:00 | 29.048 | 39.676 | 36.772 | 47.132 | 28.457 | 4.591 | 23.098 | 3.801 |
| 4/23/2005 12:00 | 29.043 | 39.663 | 36.756 | 47.15 | 28.487 | 4.572 | 23.108 | 3.814 |
| 4/23/2005 16:00 | 29.021 | 39.606 | 36.726 | 47.136 | 28.47 | 4.589 | 23.106 | 3.821 |
| 4/23/2005 20:00 | 29.026 | 39.576 | 36.728 | 47.134 | 28.457 | 4.581 | 23.104 | 3.834 |
| 4/24/2005 0:00 | 29.041 | 39.591 | 36.738 | 47.136 | 28.492 | 4.574 | 23.115 | 3.848 |
| 4/24/2005 4:00 | 29.038 | 39.593 | 36.738 | 47.106 | 28.517 | 4.579 | 23.123 | 3.858 |
| 4/24/2005 8:00 | 29.051 | 39.593 | 36.736 | 47.136 | 28.531 | 4.575 | 23.127 | 3.868 |
| 4/24/2005 12:00 | 29.038 | 39.574 | 36.716 | 47.13 | 28.52 | 4.573 | 23.127 | 3.871 |
| 4/24/2005 16:00 | 29.008 | 39.499 | 36.677 | 47.116 | 28.544 | 4.569 | 23.11 | 3.871 |
| 4/24/2005 20:00 | 28.996 | 39.461 | 36.673 | 47.074 | 28.466 | 4.56 | 23.102 | 3.879 |
| 4/25/2005 0:00 | 28.996 | 39.458 | 36.687 | 47.113 | 28.468 | 4.56 | 23.102 | 3.888 |
| 4/25/2005 4:00 | 28.976 | 39.426 | 36.665 | 47.104 | 28.458 | 4.585 | 23.094 | 3.885 |
| 4/25/2005 8:00 | 28.989 | 39.411 | 36.671 | 47.102 | 28.466 | 4.565 | 23.092 | 3.891 |
| 4/25/2005 12:00 | 28.996 | 39.429 | 36.675 | 47.067 | 28.481 | 4.554 | 23.094 | 3.896 |
| 4/25/2005 16:00 | 28.996 | 39.401 | 36.657 | 47.093 | 28.488 | 4.553 | 23.09 | 3.9 |
| 4/25/2005 20:00 | 29.016 | 39.439 | 36.683 | 47.067 | 28.496 | 4.582 | 23.102 | 3.907 |
| 4/26/2005 0:00 | 29.028 | 39.465 | 36.681 | 47.072 | 28.522 | 4.563 | 23.113 | 3.912 |
| 4/26/2005 4:00 | 29.038 | 39.458 | 36.671 | 47.097 | 28.526 | 4.555 | 23.111 | 3.914 |
| 4/26/2005 8:00 | 29.073 | 39.508 | 36.708 | 47.106 | 28.561 | 4.567 | 23.129 | 3.932 |
| 4/26/2005 12:00 | 29.11 | 39.563 | 36.724 | 47.125 | 28.61 | 4.582 | 23.148 | 3.944 |
| 4/26/2005 16:00 | 29.128 | 39.597 | 36.718 | 47.141 | 28.638 | 4.579 | 23.16 | 3.952 |
| 4/26/2005 20:00 | 29.15 | 39.631 | 36.736 | 47.16 | 28.666 | 4.586 | 23.173 | 3.967 |
| 4/27/2005 0:00 | 29.195 | 39.693 | 36.752 | 47.109 | 28.716 | 4.589 | 23.195 | 3.978 |
| 4/27/2005 4:00 | 29.222 | 39.732 | 36.758 | 47.143 | 28.755 | 4.599 | 23.206 | 3.992 |
| 4/27/2005 8:00 | 29.232 | 39.766 | 36.766 | 47.118 | 28.792 | 4.603 | 23.226 | 4.006 |
| 4/27/2005 12:00 | 29.261 | 39.791 | 36.762 | 47.15 | 28.833 | 4.613 | 23.235 | 4.018 |
| 4/27/2005 16:00 | 29.279 | 39.772 | 36.742 | 47.141 | 28.852 | 4.617 | 23.243 | 4.026 |
| 4/27/2005 20:00 | 29.294 | 39.787 | 36.758 | 47.141 | 28.86 | 4.616 | 23.251 | 4.039 |
| 4/28/2005 0:00 | 29.303 | 39.813 | 36.756 | 47.139 | 28.882 | 4.616 | 23.263 | 4.05 |
| 4/28/2005 4:00 | 29.313 | 39.817 | 36.762 | 47.141 | 28.895 | 4.618 | 23.268 | 4.057 |
| 4/28/2005 8:00 | 29.338 | 39.86 | 36.782 | 47.15 | 28.923 | 4.615 | 23.284 | 4.072 |
| 4/28/2005 12:00 | 29.355 | 39.879 | 36.768 | 47.148 | 28.953 | 4.631 | 23.292 | 4.078 |
| 4/28/2005 16:00 | 29.358 | 39.87 | 36.758 | 47.102 | 28.966 | 4.65 | 23.297 | 4.083 |
| 4/28/2005 20:00 | 29.37 | 39.875 | 36.764 | 47.134 | 28.972 | 4.634 | 23.303 | 4.095 |
| 4/29/2005 0:00 | 29.385 | 39.913 | 36.776 | 47.141 | 29 | 4.632 | 23.317 | 4.107 |
| 4/29/2005 4:00 | 29.39 | 39.898 | 36.764 | 47.134 | 29.002 | 4.623 | 23.321 | 4.112 |
| 4/29/2005 8:00 | 29.41 | 39.924 | 36.776 | 47.134 | 29.022 | 4.628 | 23.33 | 4.12 |
| 4/29/2005 12:00 | 29.432 | 39.956 | 36.788 | 47.139 | 29.054 | 4.632 | 23.342 | 4.132 |
| 4/29/2005 16:00 | 29.43 | 39.954 | 36.766 | 47.097 | 29.062 | 4.628 | 23.344 | 4.134 |
| 4/29/2005 20:00 | 29.445 | 39.964 | 36.786 | 47.134 | 29.076 | 4.645 | 23.354 | 4.149 |
| 4/30/2005 0:00 | 29.46 | 40.018 | 36.806 | 47.143 | 29.127 | 4.641 | 23.369 | 4.163 |
| 4/30/2005 4:00 | 29.494 | 40.041 | 36.804 | 47.141 | 29.155 | 4.626 | 23.381 | 4.169 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 4/30/2005 8:00 | 29.47 | 40.075 | 36.828 | 47.146 | 29.181 | 4.632 | 23.394 | 4.183 |
| 4/30/2005 12:00 | 29.522 | 40.086 | 36.804 | 47.106 | 29.186 | 4.626 | 23.404 | 4.185 |
| 4/30/2005 16:00 | 29.524 | 40.067 | 36.798 | 47.099 | 29.19 | 4.632 | 23.406 | 4.192 |
| 4/30/2005 20:00 | 29.544 | 40.076 | 36.812 | 47.134 | 29.199 | 4.622 | 23.415 | 4.207 |
| 5/1/2005 0:00 | 29.571 | 40.099 | 36.822 | 47.132 | 29.217 | 4.629 | 23.427 | 4.217 |
| 5/1/2005 4:00 | 29.591 | 40.142 | 36.836 | 47.141 | 29.248 | 4.628 | 23.443 | 4.226 |
| 5/1/2005 8:00 | 29.606 | 40.186 | 36.858 | 47.118 | 29.28 | 4.635 | 23.46 | 4.24 |
| 5/1/2005 12:00 | 29.619 | 40.195 | 36.838 | 47.104 | 29.298 | 4.631 | 23.468 | 4.242 |
| 5/1/2005 16:00 | 29.621 | 40.171 | 36.824 | 47.125 | 29.33 | 4.625 | 23.462 | 4.248 |
| 5/1/2005 20:00 | 29.633 | 40.178 | 36.838 | 47.127 | 29.317 | 4.627 | 23.475 | 4.261 |
| 5/2/2005 0:00 | 29.651 | 40.219 | 36.854 | 47.13 | 29.36 | 4.635 | 23.491 | 4.271 |
| 5/2/2005 4:00 | 29.661 | 40.218 | 36.854 | 47.13 | 29.377 | 4.617 | 23.497 | 4.277 |
| 5/2/2005 8:00 | 29.671 | 40.236 | 36.866 | 47.102 | 29.385 | 4.61 | 23.508 | 4.285 |
| 5/2/2005 12:00 | 29.683 | 40.236 | 36.856 | 47.127 | 29.392 | 4.618 | 23.516 | 4.291 |
| 5/2/2005 16:00 | 29.668 | 40.186 | 36.832 | 47.097 | 29.386 | 4.617 | 23.512 | 4.292 |
| 5/2/2005 20:00 | 29.676 | 40.161 | 36.832 | 47.093 | 29.382 | 4.612 | 23.514 | 4.301 |
| 5/3/2005 0:00 | 29.685 | 40.193 | 36.854 | 47.081 | 29.394 | 4.612 | 23.526 | 4.31 |
| 5/3/2005 4:00 | 29.703 | 40.208 | 36.86 | 47.104 | 29.427 | 4.625 | 23.532 | 4.319 |
| 5/3/2005 8:00 | 29.725 | 40.242 | 36.88 | 47.113 | 29.442 | 4.619 | 23.545 | 4.327 |
| 5/3/2005 12:00 | 29.725 | 40.248 | 36.87 | 47.107 | 29.45 | 4.625 | 23.553 | 4.329 |
| 5/3/2005 16:00 | 29.722 | 40.21 | 36.85 | 47.062 | 29.44 | 4.627 | 23.547 | 4.332 |
| 5/3/2005 20:00 | 29.732 | 40.199 | 36.858 | 47.093 | 29.453 | 4.633 | 23.555 | 4.343 |
| 5/4/2005 0:00 | 29.747 | 40.238 | 36.876 | 47.099 | 29.465 | 4.623 | 23.568 | 4.351 |
| 5/4/2005 4:00 | 29.758 | 40.255 | 36.884 | 47.072 | 29.476 | 4.628 | 23.576 | 4.359 |
| 5/4/2005 8:00 | 29.767 | 40.291 | 36.897 | 47.106 | 29.5 | 4.607 | 23.588 | 4.371 |
| 5/4/2005 12:00 | 29.785 | 40.319 | 36.893 | 47.069 | 29.521 | 4.598 | 23.597 | 4.372 |
| 5/4/2005 16:00 | 29.765 | 40.274 | 36.86 | 47.086 | 29.509 | 4.591 | 23.59 | 4.37 |
| 5/4/2005 20:00 | 29.775 | 40.265 | 36.868 | 47.058 | 29.511 | 4.648 | 23.592 | 4.381 |
| 5/5/2005 0:00 | 29.797 | 40.325 | 36.899 | 47.097 | 29.541 | 4.642 | 23.607 | 4.394 |
| 5/5/2005 4:00 | 29.787 | 40.332 | 36.891 | 47.093 | 29.547 | 4.628 | 23.613 | 4.396 |
| 5/5/2005 8:00 | 29.827 | 40.368 | 36.903 | 47.067 | 29.577 | 4.627 | 23.623 | 4.406 |
| 5/5/2005 12:00 | 29.804 | 40.409 | 36.895 | 47.088 | 29.724 | 4.638 | 23.628 | 4.407 |
| 5/5/2005 16:00 | 29.827 | 40.362 | 36.872 | 47.081 | 29.616 | 4.622 | 23.625 | 4.407 |
| 5/5/2005 20:00 | 29.827 | 40.351 | 36.882 | 47.086 | 29.603 | 4.654 | 23.628 | 4.42 |
| 5/6/2005 0:00 | 29.842 | 40.383 | 36.895 | 47.063 | 29.618 | 4.673 | 23.638 | 4.428 |
| 5/6/2005 4:00 | 29.844 | 40.392 | 36.891 | 47.056 | 29.614 | 4.656 | 23.642 | 4.43 |
| 5/6/2005 8:00 | 29.861 | 40.409 | 36.903 | 47.062 | 29.629 | 4.647 | 23.648 | 4.438 |
| 5/6/2005 12:00 | 29.849 | 40.413 | 36.888 | 47.088 | 29.655 | 4.649 | 23.65 | 4.438 |
| 5/6/2005 16:00 | 29.834 | 40.37 | 36.858 | 47.049 | 29.668 | 4.648 | 23.64 | 4.439 |
| 5/6/2005 20:00 | 29.852 | 40.379 | 36.878 | 47.053 | 29.674 | 4.65 | 23.64 | 4.456 |
| 5/7/2005 0:00 | 29.864 | 40.423 | 36.895 | 47.056 | 29.674 | 4.655 | 23.658 | 4.466 |
| 5/7/2005 4:00 | 29.866 | 40.428 | 36.893 | 47.058 | 29.672 | 4.645 | 23.661 | 4.47 |
| 5/7/2005 8:00 | 29.874 | 40.443 | 36.897 | 47.083 | 29.681 | 4.639 | 23.663 | 4.473 |
| 5/7/2005 12:00 | 29.876 | 40.441 | 36.889 | 47.088 | 29.694 | 4.643 | 23.669 | 4.482 |
| 5/7/2005 16:00 | 29.871 | 40.426 | 36.886 | 47.079 | 29.715 | 4.655 | 23.669 | 4.491 |
| 5/7/2005 20:00 | 29.852 | 40.426 | 36.893 | 47.053 | 29.689 | 4.657 | 23.673 | 4.503 |
| 5/8/2005 0:00 | 29.901 | 40.477 | 36.915 | 47.053 | 29.72 | 4.641 | 23.685 | 4.512 |
| 5/8/2005 4:00 | 29.886 | 40.47 | 36.897 | 47.079 | 29.72 | 4.651 | 23.687 | 4.511 |
| 5/8/2005 8:00 | 29.911 | 40.477 | 36.899 | 47.076 | 29.724 | 4.643 | 23.688 | 4.514 |
| 5/8/2005 12:00 | 29.909 | 40.488 | 36.899 | 47.042 | 29.737 | 4.647 | 23.692 | 4.523 |
| 5/8/2005 16:00 | 29.891 | 40.496 | 36.901 | 47.074 | 29.752 | 4.647 | 23.698 | 4.538 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 5/8/2005 20:00 | 29.933 | 40.554 | 36.957 | 47.058 | 29.825 | 4.639 | 23.714 | 4.565 |
| 5/9/2005 0:00 | 29.926 | 40.543 | 36.903 | 47.077 | 29.747 | 4.634 | 23.709 | 4.547 |
| 5/9/2005 4:00 | 29.909 | 40.556 | 36.925 | 47.049 | 29.722 | 4.625 | 23.721 | 4.555 |
| 5/9/2005 8:00 | 29.961 | 40.596 | 36.957 | 47.084 | 29.73 | 4.625 | 23.735 | 4.565 |
| 5/9/2005 12:00 | 29.973 | 40.626 | 36.949 | 47.081 | 29.756 | 4.645 | 23.747 | 4.573 |
| 5/9/2005 16:00 | 29.971 | 40.616 | 36.937 | 47.051 | 29.767 | 4.654 | 23.747 | 4.582 |
| 5/9/2005 20:00 | 29.981 | 40.611 | 36.947 | 47.053 | 29.771 | 4.649 | 23.756 | 4.597 |
| 5/10/2005 0:00 | 29.993 | 40.646 | 36.961 | 47.083 | 29.797 | 4.648 | 23.768 | 4.604 |
| 5/10/2005 4:00 | 29.995 | 40.66 | 36.965 | 47.086 | 29.81 | 4.641 | 23.776 | 4.608 |
| 5/10/2005 8:00 | 30.013 | 40.675 | 36.969 | 47.088 | 29.859 | 4.652 | 23.781 | 4.611 |
| 5/10/2005 12:00 | 30.003 | 40.671 | 36.949 | 47.083 | 29.84 | 4.66 | 23.783 | 4.616 |
| 5/10/2005 16:00 | 29.993 | 40.654 | 36.951 | 47.051 | 29.84 | 4.656 | 23.785 | 4.636 |
| 5/10/2005 20:00 | 30.005 | 40.652 | 36.957 | 47.053 | 29.853 | 4.657 | 23.789 | 4.651 |
| 5/11/2005 0:00 | 30.03 | 40.673 | 36.965 | 47.056 | 29.87 | 4.676 | 23.797 | 4.656 |
| 5/11/2005 4:00 | 30.053 | 40.744 | 37.007 | 47.09 | 29.896 | 4.668 | 23.814 | 4.674 |
| 5/11/2005 8:00 | 30.077 | 40.812 | 37.029 | 47.069 | 29.926 | 4.675 | 23.829 | 4.684 |
| 5/11/2005 12:00 | 30.075 | 40.821 | 36.991 | 47.09 | 29.946 | 4.662 | 23.835 | 4.678 |
| 5/11/2005 16:00 | 30.082 | 40.818 | 37.005 | 47.1 | 29.918 | 4.644 | 23.843 | 4.685 |
| 5/11/2005 20:00 | 30.067 | 40.814 | 37.009 | 47.083 | 29.894 | 4.625 | 23.849 | 4.681 |
| 5/12/2005 0:00 | 30.048 | 40.795 | 37.021 | 47.099 | 29.747 | 4.625 | 23.82 | 4.691 |
| 5/12/2005 4:00 | 30.028 | 40.763 | 37.013 | 47.102 | 29.709 | 4.635 | 23.83 | 4.69 |
| 5/12/2005 8:00 | 29.978 | 40.735 | 37.057 | 47.113 | 29.495 | 4.609 | 23.742 | 4.688 |
| 5/12/2005 12:00 | 29.896 | 40.631 | 36.979 | 47.079 | 29.372 | 4.607 | 23.615 | 4.681 |
| 5/12/2005 16:00 | 29.824 | 40.483 | 36.955 | 47.083 | 29.282 | 4.617 | 23.624 | 4.678 |
| 5/12/2005 20:00 | 28.478 | 40.186 | 36.903 | 47.084 | 28.306 | 3.126 | 23.079 | 0.487 |
| 5/13/2005 0:00 | 27.609 | 39.868 | 36.848 | 47.102 | 27.881 | 3.329 | 22.515 | 0.345 |
| 5/13/2005 4:00 | 27.014 | 39.561 | 36.762 | 47.086 | 27.508 | 3.557 | 22.219 | 0.302 |
| 5/13/2005 8:00 | 26.596 | 39.315 | 36.583 | 47.107 | 27.201 | 3.746 | 21.69 | 0.309 |
| 5/13/2005 12:00 | 26.291 | 39.138 | 36.255 | 47.12 | 27.011 | 3.907 | 21.25 | 0.341 |
| 5/13/2005 16:00 | 26.063 | 38.984 | 36.006 | 47.123 | 26.897 | 4.026 | 21.06 | 0.368 |
| 5/13/2005 20:00 | 25.917 | 38.861 | 35.819 | 47.127 | 26.848 | 4.104 | 20.9 | 0.398 |
| 5/14/2005 0:00 | 25.81 | 38.75 | 35.634 | 47.125 | 26.783 | 4.148 | 20.81 | 0.422 |
| 5/14/2005 4:00 | 25.743 | 38.639 | 35.422 | 47.121 | 26.735 | 4.164 | 20.743 | 0.442 |
| 5/14/2005 8:00 | 25.706 | 38.564 | 35.261 | 47.118 | 26.706 | 4.14 | 20.694 | 0.466 |
| 5/14/2005 12:00 | 25.696 | 38.536 | 35.098 | 47.132 | 26.736 | 4.17 | 20.663 | 0.515 |
| 5/14/2005 16:00 | 25.679 | 38.47 | 34.908 | 47.086 | 26.725 | 4.1 | 20.625 | 0.551 |
| 5/14/2005 20:00 | 25.677 | 38.412 | 34.735 | 47.077 | 26.701 | 4.164 | 20.603 | 0.59 |
| 5/15/2005 0:00 | 25.689 | 38.384 | 34.578 | 47.067 | 26.693 | 4.209 | 20.596 | 0.628 |
| 5/15/2005 4:00 | 25.699 | 38.346 | 34.392 | 47.093 | 26.691 | 4.2 | 20.58 | 0.653 |
| 5/15/2005 8:00 | 25.744 | 38.348 | 34.261 | 47.084 | 26.708 | 4.207 | 20.592 | 0.696 |
| 5/15/2005 12:00 | 25.749 | 38.308 | 34.062 | 47.047 | 26.715 | 4.202 | 20.576 | 0.725 |
| 5/15/2005 16:00 | 25.746 | 38.237 | 33.873 | 47.06 | 26.708 | 4.23 | 20.551 | 0.756 |
| 5/15/2005 20:00 | 25.754 | 38.169 | 33.721 | 47.049 | 26.691 | 4.236 | 20.532 | 0.785 |
| 5/16/2005 0:00 | 25.788 | 38.156 | 33.644 | 47.044 | 26.707 | 4.256 | 20.543 | 0.823 |
| 5/16/2005 4:00 | 25.823 | 38.122 | 33.508 | 47 | 26.704 | 4.232 | 20.539 | 0.848 |
| 5/16/2005 8:00 | 25.865 | 38.109 | 33.411 | 47.019 | 26.719 | 4.207 | 20.557 | 0.886 |
| 5/16/2005 12:00 | 25.883 | 38.079 | 33.276 | 47.005 | 26.735 | 4.208 | 20.553 | 0.921 |
| 5/16/2005 16:00 | 25.88 | 38 | 33.086 | 46.984 | 26.719 | 4.176 | 20.53 | 0.956 |
| 5/16/2005 20:00 | 25.93 | 37.975 | 32.971 | 46.975 | 26.741 | 4.211 | 20.547 | 1.011 |
| 5/17/2005 0:00 | 25.977 | 37.983 | 32.883 | 46.961 | 26.741 | 4.203 | 20.572 | 1.056 |
| 5/17/2005 4:00 | 26.014 | 37.962 | 32.798 | 46.95 | 26.741 | 4.195 | 20.584 | 1.084 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 5/17/2005 8:00 | 26.059 | 37.962 | 32.748 | 46.929 | 26.763 | 4.191 | 20.611 | 1.123 |
| 5/17/2005 12:00 | 26.089 | 37.936 | 32.668 | 46.908 | 26.765 | 4.199 | 20.623 | 1.166 |
| 5/17/2005 16:00 | 26.111 | 37.889 | 32.583 | 46.885 | 26.759 | 4.207 | 20.619 | 1.213 |
| 5/17/2005 20:00 | 26.175 | 37.896 | 32.525 | 46.848 | 26.781 | 4.187 | 20.656 | 1.279 |
| 5/18/2005 0:00 | 26.24 | 37.923 | 32.459 | 46.852 | 26.809 | 4.179 | 20.698 | 1.323 |
| 5/18/2005 4:00 | 26.285 | 37.932 | 32.394 | 46.811 | 26.828 | 4.197 | 20.729 | 1.359 |
| 5/18/2005 8:00 | 26.339 | 37.923 | 32.322 | 46.783 | 26.845 | 4.198 | 20.751 | 1.39 |
| 5/18/2005 12:00 | 26.404 | 37.947 | 32.259 | 46.795 | 26.875 | 4.177 | 20.789 | 1.445 |
| 5/18/2005 16:00 | 26.441 | 37.945 | 32.177 | 46.751 | 26.895 | 4.2 | 20.811 | 1.492 |
| 5/18/2005 20:00 | 26.498 | 37.943 | 32.074 | 46.757 | 26.923 | 4.202 | 20.84 | 1.543 |
| 5/19/2005 0:00 | 26.558 | 38.004 | 31.98 | 46.746 | 26.963 | 4.201 | 20.892 | 1.591 |
| 5/19/2005 4:00 | 26.565 | 37.99 | 31.847 | 46.723 | 26.974 | 4.191 | 20.912 | 1.614 |
| 5/19/2005 8:00 | 26.657 | 38.011 | 31.753 | 46.691 | 27.007 | 4.194 | 20.947 | 1.651 |
| 5/19/2005 12:00 | 26.687 | 38.019 | 31.63 | 46.679 | 27.045 | 4.233 | 20.962 | 1.698 |
| 5/19/2005 16:00 | 26.719 | 37.988 | 31.483 | 46.656 | 27.071 | 4.253 | 20.978 | 1.759 |
| 5/19/2005 20:00 | 26.774 | 38.007 | 31.395 | 46.603 | 27.102 | 4.262 | 21.014 | 1.827 |
| 5/20/2005 0:00 | 26.836 | 38.058 | 31.345 | 46.587 | 27.136 | 4.258 | 21.057 | 1.874 |
| 5/20/2005 4:00 | 26.885 | 38.071 | 31.258 | 46.596 | 27.16 | 4.284 | 21.086 | 1.904 |
| 5/20/2005 8:00 | 26.952 | 38.139 | 31.238 | 46.575 | 27.214 | 4.286 | 21.134 | 1.948 |
| 5/20/2005 12:00 | 26.994 | 38.161 | 31.156 | 46.552 | 27.259 | 4.295 | 21.162 | 1.993 |
| 5/20/2005 16:00 | 27.012 | 38.133 | 31.027 | 46.524 | 27.272 | 4.289 | 21.171 | 2.044 |
| 5/20/2005 20:00 | 27.056 | 38.133 | 30.949 | 46.494 | 27.3 | 4.31 | 21.196 | 2.105 |
| 5/21/2005 0:00 | 27.096 | 38.156 | 30.896 | 46.469 | 27.325 | 4.295 | 21.223 | 2.143 |
| 5/21/2005 4:00 | 27.114 | 38.141 | 30.804 | 46.441 | 27.332 | 4.281 | 21.231 | 2.165 |
| 5/21/2005 8:00 | 27.136 | 38.12 | 30.709 | 46.409 | 27.336 | 4.287 | 21.241 | 2.186 |
| 5/21/2005 12:00 | 27.133 | 38.092 | 30.597 | 46.374 | 27.341 | 4.285 | 21.241 | 2.216 |
| 5/21/2005 16:00 | 27.153 | 38.069 | 30.48 | 46.342 | 27.405 | 4.26 | 21.237 | 2.262 |
| 5/21/2005 20:00 | 27.185 | 38.06 | 30.434 | 46.286 | 27.375 | 4.299 | 21.261 | 2.32 |
| 5/22/2005 0:00 | 27.225 | 38.094 | 30.418 | 46.289 | 27.396 | 4.293 | 21.289 | 2.351 |
| 5/22/2005 4:00 | 27.287 | 38.146 | 30.45 | 46.272 | 27.422 | 4.293 | 21.332 | 2.391 |
| 5/22/2005 8:00 | 27.35 | 38.216 | 30.494 | 46.229 | 27.472 | 4.302 | 21.379 | 2.425 |
| 5/22/2005 12:00 | 27.364 | 38.242 | 30.462 | 46.238 | 27.513 | 4.299 | 21.404 | 2.474 |
| 5/22/2005 16:00 | 27.384 | 38.203 | 30.337 | 46.18 | 27.545 | 4.306 | 21.404 | 2.522 |
| 5/22/2005 20:00 | 27.409 | 38.191 | 30.279 | 46.187 | 27.556 | 4.295 | 21.417 | 2.575 |
| 5/23/2005 0:00 | 27.424 | 38.203 | 30.249 | 46.166 | 27.562 | 4.277 | 21.433 | 2.603 |
| 5/23/2005 4:00 | 27.444 | 38.191 | 30.198 | 46.111 | 27.556 | 4.305 | 21.445 | 2.626 |
| 5/23/2005 8:00 | 27.486 | 38.216 | 30.194 | 46.111 | 27.584 | 4.293 | 21.466 | 2.656 |
| 5/23/2005 12:00 | 27.509 | 38.267 | 30.168 | 46.099 | 27.782 | 4.289 | 21.485 | 2.699 |
| 5/23/2005 16:00 | 27.516 | 38.235 | 30.084 | 46.039 | 27.685 | 4.314 | 21.487 | 2.747 |
| 5/23/2005 20:00 | 27.541 | 38.22 | 30.057 | 46.048 | 27.717 | 4.3 | 21.501 | 2.794 |
| 5/24/2005 0:00 | 27.585 | 38.267 | 30.128 | 46.007 | 27.704 | 4.32 | 21.536 | 2.828 |
| 5/24/2005 4:00 | 27.615 | 38.267 | 30.142 | 45.988 | 27.691 | 4.302 | 21.555 | 2.851 |
| 5/24/2005 8:00 | 27.65 | 38.282 | 30.172 | 46.002 | 27.709 | 4.322 | 21.576 | 2.873 |
| 5/24/2005 12:00 | 27.672 | 38.302 | 30.198 | 45.986 | 27.737 | 4.335 | 21.598 | 2.908 |
| 5/24/2005 16:00 | 27.702 | 38.372 | 30.2 | 45.967 | 27.818 | 4.333 | 21.611 | 2.955 |
| 5/24/2005 20:00 | 27.727 | 38.417 | 30.206 | 45.951 | 27.909 | 4.343 | 21.628 | 3.002 |
| 5/25/2005 0:00 | 27.776 | 38.455 | 30.312 | 45.944 | 27.872 | 4.345 | 21.665 | 3.039 |
| 5/25/2005 4:00 | 27.759 | 38.457 | 30.322 | 45.93 | 27.859 | 4.329 | 21.673 | 3.047 |
| 5/25/2005 8:00 | 27.834 | 38.492 | 30.414 | 45.921 | 27.874 | 4.348 | 21.704 | 3.079 |
| 5/25/2005 12:00 | 27.854 | 38.551 | 30.44 | 45.907 | 27.945 | 4.34 | 21.718 | 3.108 |
| 5/25/2005 16:00 | 27.844 | 38.515 | 30.428 | 45.887 | 28.01 | 4.376 | 21.721 | 3.151 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 5/25/2005 20:00 | 27.916 | 38.566 | 30.589 | 45.889 | 27.98 | 4.359 | 21.766 | 3.203 |
| 5/26/2005 0:00 | 27.958 | 38.594 | 30.689 | 45.85 | 27.988 | 4.354 | 21.795 | 3.227 |
| 5/26/2005 4:00 | 27.983 | 38.603 | 30.74 | 45.87 | 27.991 | 4.352 | 21.814 | 3.244 |
| 5/26/2005 8:00 | 28.002 | 38.613 | 30.802 | 45.863 | 28.003 | 4.37 | 21.832 | 3.268 |
| 5/26/2005 12:00 | 28.012 | 38.603 | 30.814 | 45.852 | 28.019 | 4.391 | 21.841 | 3.295 |
| 5/26/2005 16:00 | 27.965 | 38.545 | 30.757 | 45.827 | 28.023 | 4.391 | 21.832 | 3.332 |
| 5/26/2005 20:00 | 27.985 | 38.521 | 30.761 | 45.817 | 28.006 | 4.403 | 21.834 | 3.372 |
| 5/27/2005 0:00 | 28.037 | 38.555 | 30.83 | 45.801 | 28.025 | 4.393 | 21.863 | 3.401 |
| 5/27/2005 4:00 | 28.052 | 38.568 | 30.854 | 45.787 | 28.038 | 4.398 | 21.874 | 3.415 |
| 5/27/2005 8:00 | 28.074 | 38.577 | 30.884 | 45.773 | 28.057 | 4.393 | 21.884 | 3.432 |
| 5/27/2005 12:00 | 28.072 | 38.577 | 30.908 | 45.759 | 28.074 | 4.391 | 21.898 | 3.469 |
| 5/27/2005 16:00 | 28.079 | 38.577 | 30.872 | 45.713 | 28.113 | 4.39 | 21.894 | 3.494 |
| 5/27/2005 20:00 | 28.057 | 38.547 | 30.844 | 45.718 | 28.094 | 4.389 | 21.892 | 3.524 |
| 5/28/2005 0:00 | 28.089 | 38.577 | 30.908 | 45.676 | 28.1 | 4.373 | 21.915 | 3.546 |
| 5/28/2005 4:00 | 28.124 | 38.59 | 30.934 | 45.697 | 28.111 | 4.384 | 21.927 | 3.559 |
| 5/28/2005 8:00 | 28.151 | 38.62 | 30.998 | 45.688 | 28.133 | 4.362 | 21.946 | 3.576 |
| 5/28/2005 12:00 | 28.161 | 38.641 | 31.022 | 45.672 | 28.163 | 4.394 | 21.958 | 3.605 |
| 5/28/2005 16:00 | 28.164 | 38.609 | 30.988 | 45.658 | 28.169 | 4.396 | 21.957 | 3.639 |
| 5/28/2005 20:00 | 28.169 | 38.596 | 30.994 | 45.612 | 28.167 | 4.381 | 21.961 | 3.665 |
| 5/29/2005 0:00 | 28.184 | 38.622 | 31.042 | 45.63 | 28.182 | 4.373 | 21.98 | 3.68 |
| 5/29/2005 4:00 | 28.194 | 38.609 | 31.036 | 45.584 | 28.184 | 4.371 | 21.984 | 3.689 |
| 5/29/2005 8:00 | 28.236 | 38.677 | 31.145 | 45.609 | 28.214 | 4.396 | 22.009 | 3.71 |
| 5/29/2005 12:00 | 28.238 | 38.688 | 31.171 | 45.595 | 28.238 | 4.435 | 22.023 | 3.731 |
| 5/29/2005 16:00 | 28.263 | 38.699 | 31.181 | 45.558 | 28.333 | 4.431 | 22.033 | 3.769 |
| 5/29/2005 20:00 | 28.273 | 38.705 | 31.239 | 45.582 | 28.316 | 4.43 | 22.054 | 3.803 |
| 5/30/2005 0:00 | 28.3 | 38.716 | 31.312 | 45.577 | 28.3 | 4.425 | 22.077 | 3.818 |
| 5/30/2005 4:00 | 28.325 | 38.705 | 31.332 | 45.54 | 28.298 | 4.419 | 22.089 | 3.826 |
| 5/30/2005 8:00 | 28.352 | 38.729 | 31.388 | 45.563 | 28.313 | 4.409 | 22.102 | 3.841 |
| 5/30/2005 12:00 | 28.345 | 38.733 | 31.398 | 45.561 | 28.324 | 4.419 | 22.112 | 3.858 |
| 5/30/2005 16:00 | 28.355 | 38.737 | 31.4 | 45.547 | 28.365 | 4.421 | 22.122 | 3.883 |
| 5/30/2005 20:00 | 28.362 | 38.724 | 31.388 | 45.503 | 28.365 | 4.417 | 22.126 | 3.909 |
| 5/31/2005 0:00 | 28.37 | 38.741 | 31.412 | 45.494 | 28.365 | 4.417 | 22.135 | 3.918 |
| 5/31/2005 4:00 | 28.382 | 38.743 | 31.414 | 45.482 | 28.362 | 4.416 | 22.137 | 3.924 |
| 5/31/2005 8:00 | 28.397 | 38.76 | 31.436 | 45.496 | 28.386 | 4.421 | 22.153 | 3.935 |
| 5/31/2005 12:00 | 28.395 | 38.756 | 31.42 | 45.459 | 28.39 | 4.417 | 22.152 | 3.95 |
| 5/31/2005 16:00 | 28.367 | 38.735 | 31.38 | 45.445 | 28.425 | 4.416 | 22.153 | 3.979 |
| 5/31/2005 20:00 | 28.367 | 38.739 | 31.44 | 45.468 | 28.399 | 4.377 | 22.172 | 3.993 |
| 6/1/2005 0:00 | 28.323 | 38.739 | 31.489 | 45.461 | 28.108 | 4.4 | 22.079 | 3.997 |
| 6/1/2005 4:00 | 28.243 | 38.639 | 31.475 | 45.45 | 27.945 | 4.38 | 22.032 | 3.994 |
| 6/1/2005 8:00 | 28.213 | 38.566 | 31.496 | 45.413 | 27.871 | 4.361 | 22.025 | 3.997 |
| 6/1/2005 12:00 | 28.127 | 38.513 | 31.516 | 45.406 | 27.798 | 4.363 | 22.036 | 4 |
| 6/1/2005 16:00 | 28.134 | 38.434 | 31.478 | 45.394 | 27.727 | 4.376 | 22.044 | 4.007 |
| 6/1/2005 20:00 | 28.122 | 38.384 | 31.482 | 45.404 | 27.686 | 4.37 | 22.057 | 4.024 |
| 6/2/2005 0:00 | 28.109 | 38.359 | 31.5 | 45.399 | 27.663 | 4.388 | 22.073 | 4.025 |
| 6/2/2005 4:00 | 28.102 | 38.318 | 31.496 | 45.387 | 27.643 | 4.397 | 22.079 | 4.023 |
| 6/2/2005 8:00 | 28.104 | 38.314 | 31.52 | 45.348 | 27.647 | 4.384 | 22.09 | 4.021 |
| 6/2/2005 12:00 | 28.119 | 38.361 | 31.551 | 45.367 | 27.691 | 4.39 | 22.1 | 4.04 |
| 6/2/2005 16:00 | 28.084 | 38.272 | 31.462 | 45.353 | 27.669 | 4.374 | 22.083 | 4.043 |
| 6/2/2005 20:00 | 28.079 | 38.261 | 31.466 | 45.341 | 27.673 | 4.362 | 22.092 | 4.06 |
| 6/3/2005 0:00 | 28.082 | 38.252 | 31.472 | 45.3 | 27.671 | 4.356 | 22.096 | 4.055 |
| 6/3/2005 4:00 | 28.072 | 38.214 | 31.438 | 45.284 | 27.663 | 4.345 | 22.088 | 4.049 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|--------|-------|--------|--------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 6/3/2005 8:00 | 27.942 | 38.165 | 31.49 | 45.307 | 27.245 | 4.23 | 22.096 | 3.994 |
| 6/3/2005 12:00 | 27.238 | 37.9 | 31.414 | 45.29 | 26.808 | 4.112 | 21.411 | 3.842 |
| 6/3/2005 16:00 | 26.766 | 37.701 | 31.398 | 45.279 | 26.616 | 4.195 | 20.868 | 3.611 |
| 6/3/2005 20:00 | 26.456 | 37.567 | 31.362 | 45.27 | 26.45 | 4.227 | 20.729 | 3.392 |
| 6/4/2005 0:00 | 26.267 | 37.446 | 31.275 | 45.221 | 26.325 | 4.205 | 20.606 | 3.175 |
| 6/4/2005 4:00 | 26.051 | 37.277 | 31.177 | 45.21 | 26.073 | 4.081 | 20.568 | 2.967 |
| 6/4/2005 8:00 | 25.685 | 37.102 | 31.046 | 45.191 | 25.817 | 3.879 | 19.977 | 2.612 |
| 6/4/2005 12:00 | 25.452 | 36.993 | 30.923 | 45.212 | 25.735 | 3.983 | 19.851 | 2.231 |
| 6/4/2005 16:00 | 25.192 | 36.828 | 30.688 | 45.166 | 25.647 | 4.003 | 19.789 | 1.925 |
| 6/4/2005 20:00 | 24.059 | 36.455 | 29.8 | 45.175 | 24.773 | 2.003 | 18.898 | -0.109 |
| 6/5/2005 0:00 | 23.775 | 36.171 | 25.248 | 45.161 | 24.421 | 2.314 | 18.199 | -0.168 |
| 6/5/2005 4:00 | 23.518 | 35.934 | 23.798 | 45.143 | 24.325 | 2.856 | 18.241 | -0.193 |
| 6/5/2005 8:00 | 23.363 | 35.783 | 23.471 | 45.094 | 24.269 | 3.185 | 18.282 | -0.165 |
| 6/5/2005 12:00 | 23.262 | 35.633 | 23.207 | 45.082 | 24.226 | 3.463 | 18.295 | -0.097 |
| 6/5/2005 16:00 | 23.176 | 35.51 | 22.817 | 45.092 | 24.179 | 3.626 | 18.27 | -0.041 |
| 6/5/2005 20:00 | 23.127 | 35.384 | 22.326 | 45.057 | 24.13 | 3.7 | 18.249 | 0.024 |
| 6/6/2005 0:00 | 23.102 | 35.283 | 21.881 | 45.032 | 24.093 | 3.753 | 18.247 | 0.068 |
| 6/6/2005 4:00 | 23.075 | 35.187 | 21.481 | 45.004 | 24.052 | 3.782 | 18.234 | 0.106 |
| 6/6/2005 8:00 | 23.065 | 35.102 | 21.159 | 44.939 | 24.005 | 3.778 | 18.224 | 0.141 |
| 6/6/2005 12:00 | 23.036 | 35.012 | 20.852 | 44.925 | 23.955 | 3.794 | 18.212 | 0.186 |
| 6/6/2005 16:00 | 23.008 | 34.897 | 20.459 | 44.877 | 23.891 | 3.789 | 18.176 | 0.228 |
| 6/6/2005 20:00 | 22.983 | 34.792 | 20.091 | 44.831 | 23.82 | 3.767 | 18.149 | 0.263 |
| 6/7/2005 0:00 | 23.023 | 34.743 | 19.924 | 44.787 | 23.796 | 3.784 | 18.174 | 0.301 |
| 6/7/2005 4:00 | 23.008 | 34.645 | 19.709 | 44.706 | 23.743 | 3.783 | 18.139 | 0.31 |
| 6/7/2005 8:00 | 23.031 | 34.581 | 19.538 | 44.683 | 23.717 | 3.766 | 18.145 | 0.344 |
| 6/7/2005 12:00 | 23.06 | 34.532 | 19.421 | 44.634 | 23.702 | 3.761 | 18.166 | 0.393 |
| 6/7/2005 16:00 | 23.055 | 34.453 | 19.25 | 44.574 | 23.713 | 3.762 | 18.143 | 0.433 |
| 6/7/2005 20:00 | 23.078 | 34.378 | 19.133 | 44.514 | 23.659 | 3.761 | 18.153 | 0.477 |
| 6/8/2005 0:00 | 23.12 | 34.346 | 19.067 | 44.468 | 23.652 | 3.763 | 18.176 | 0.504 |
| 6/8/2005 4:00 | 23.113 | 34.271 | 18.926 | 44.412 | 23.611 | 3.772 | 18.159 | 0.512 |
| 6/8/2005 8:00 | 23.13 | 34.214 | 18.872 | 44.322 | 23.59 | 3.788 | 18.171 | 0.541 |
| 6/8/2005 12:00 | 23.194 | 34.199 | 18.876 | 44.274 | 23.599 | 3.782 | 18.219 | 0.611 |
| 6/8/2005 16:00 | 23.225 | 34.148 | 18.849 | 44.241 | 23.669 | 3.792 | 18.238 | 0.668 |
| 6/8/2005 20:00 | 23.264 | 34.116 | 18.876 | 44.186 | 23.628 | 3.794 | 18.283 | 0.723 |
| 6/9/2005 0:00 | 23.331 | 34.094 | 18.9 | 44.11 | 23.621 | 3.797 | 18.293 | 0.748 |
| 6/9/2005 4:00 | 23.371 | 34.064 | 18.97 | 44.059 | 23.617 | 3.812 | 18.343 | 0.779 |
| 6/9/2005 8:00 | 23.388 | 34.03 | 19.018 | 44.034 | 23.617 | 3.819 | 18.353 | 0.8 |
| 6/9/2005 12:00 | 23.478 | 34.009 | 19.08 | 43.953 | 23.62 | 3.827 | 18.395 | 0.842 |
| 6/9/2005 16:00 | 23.5 | 33.971 | 19.13 | 43.932 | | 3.795 | 18.406 | 0.846 |
| 6/9/2005 20:00 | 23.49 | 33.853 | 19.046 | 43.83 | | 3.809 | 18.342 | 0.838 |
| 6/10/2005 0:00 | 23.513 | 33.857 | 19.221 | 43.814 | | 3.792 | 18.445 | 0.907 |
| 6/10/2005 4:00 | 23.436 | 33.761 | 19.152 | 43.754 | | 3.712 | 17.961 | 0.671 |
| 6/10/2005 8:00 | 22.975 | 33.64 | 18.69 | 43.659 | | 2.95 | 17.567 | 0.098 |
| 6/10/2005 12:00 | 22.738 | 33.531 | 18.359 | 43.602 | | 3.06 | 17.274 | 0.187 |
| 6/10/2005 16:00 | 22.524 | 33.362 | 18.125 | 43.56 | | 3.238 | 17.199 | 0.208 |
| 6/10/2005 20:00 | 22.425 | 33.294 | 18.147 | 43.5 | | 3.358 | 17.266 | 0.287 |
| 6/11/2005 0:00 | 22.368 | 33.196 | 18.127 | 43.405 | | 3.471 | 17.243 | 0.307 |
| 6/11/2005 4:00 | 21.646 | 33.076 | 18.107 | 43.338 | | 2.239 | 17.199 | 0.285 |
| 6/11/2005 8:00 | 21.431 | 32.899 | 15.826 | 43.303 | | 1.699 | 16.116 | -0.201 |
| 6/11/2005 12:00 | 21.163 | 32.716 | 15.671 | 43.236 | | 2.083 | 15.953 | -0.204 |
| 6/11/2005 16:00 | 20.99 | 32.502 | 15.528 | 43.165 | | 2.501 | 15.785 | -0.212 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|--------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 6/11/2005 20:00 | 20.907 | 32.338 | 15.458 | 43.068 | | 2.789 | 15.796 | -0.099 |
| 6/12/2005 0:00 | 20.858 | 32.195 | 15.416 | 43.04 | | 2.992 | 15.799 | -0.069 |
| 6/12/2005 4:00 | 20.842 | 32.014 | 15.367 | 42.962 | | 3.13 | 15.766 | -0.056 |
| 6/12/2005 8:00 | 20.822 | 31.877 | 15.335 | 42.897 | | 3.212 | 15.75 | -0.054 |
| 6/12/2005 12:00 | 20.553 | 31.647 | 15.186 | 42.788 | | 2.843 | 15.152 | -0.074 |
| 6/12/2005 16:00 | 20.459 | 31.444 | 15.063 | 42.747 | | 2.968 | 15.129 | -0.098 |
| 6/12/2005 20:00 | 20.344 | 31.235 | 14.961 | 42.64 | | 3.034 | 15.065 | -0.108 |
| 6/13/2005 0:00 | 20.283 | 31.054 | 14.886 | 42.592 | | 3.075 | 14.967 | -0.102 |
| 6/13/2005 4:00 | 20.218 | 30.877 | 14.796 | 42.513 | | 3.102 | 14.887 | -0.071 |
| 6/13/2005 8:00 | 20.199 | 30.764 | 14.794 | 42.444 | | 3.12 | 14.922 | -0.068 |
| 6/13/2005 12:00 | 20.214 | 30.625 | 14.763 | 42.366 | | 3.158 | 14.905 | -0.035 |
| 6/13/2005 16:00 | 20.207 | 30.463 | 14.719 | 42.271 | | 3.208 | 14.87 | 0.034 |
| 6/13/2005 20:00 | 20.244 | 30.33 | 14.711 | 42.178 | | 3.187 | 14.899 | 0.093 |
| 6/14/2005 0:00 | 20.316 | 30.243 | 14.753 | 42.093 | | 3.228 | 14.99 | 0.146 |
| 6/14/2005 4:00 | 20.381 | 30.134 | 14.779 | 42.001 | | 3.257 | 15.046 | 0.18 |
| 6/14/2005 8:00 | 20.46 | 30.04 | 14.822 | 41.885 | | 3.334 | 15.116 | 0.221 |
| 6/14/2005 12:00 | 20.498 | 29.929 | 14.84 | 41.825 | | 3.323 | 15.136 | 0.261 |
| 6/14/2005 16:00 | 20.532 | 29.81 | 14.856 | 41.703 | | 3.352 | 15.152 | 0.312 |
| 6/14/2005 20:00 | 20.572 | 29.693 | 14.872 | 41.626 | | 3.342 | 15.154 | 0.352 |
| 6/15/2005 0:00 | 20.617 | 29.603 | 14.9 | 41.534 | | 3.329 | 15.195 | 0.378 |
| 6/15/2005 4:00 | 20.642 | 29.509 | 14.928 | 41.432 | | 3.35 | 15.219 | 0.395 |
| 6/15/2005 8:00 | 20.699 | 29.409 | 14.962 | 41.328 | | 3.365 | 15.24 | 0.418 |
| 6/15/2005 12:00 | 20.724 | 29.32 | 14.982 | 41.204 | | 3.364 | 15.25 | 0.456 |
| 6/15/2005 16:00 | 20.736 | 29.203 | 14.986 | 41.083 | | 3.393 | 15.226 | 0.492 |
| 6/15/2005 20:00 | 20.753 | 29.096 | 14.997 | 40.986 | | 3.387 | 15.211 | 0.516 |
| 6/16/2005 0:00 | 20.783 | 29.015 | 15.035 | 40.827 | | 3.379 | 15.234 | 0.537 |
| 6/16/2005 4:00 | 20.826 | 28.94 | 15.075 | 40.746 | | 3.377 | 15.26 | 0.552 |
| 6/16/2005 8:00 | 20.871 | 28.881 | 15.119 | 40.651 | | 3.363 | 15.294 | 0.573 |
| 6/16/2005 12:00 | 20.868 | 28.772 | 15.135 | 40.518 | | 3.361 | 15.269 | 0.594 |
| 6/16/2005 16:00 | 20.886 | 28.674 | 15.151 | 40.414 | | 3.363 | 15.256 | 0.633 |
| 6/16/2005 20:00 | 20.888 | 28.59 | 15.177 | 40.344 | | 3.363 | 15.252 | 0.654 |
| 6/17/2005 0:00 | 20.938 | 28.533 | 15.219 | 40.25 | | 3.387 | 15.271 | 0.671 |
| 6/17/2005 4:00 | 20.959 | 28.477 | 15.25 | 40.162 | | 3.395 | 15.279 | 0.68 |
| 6/17/2005 8:00 | 20.997 | 28.454 | 15.302 | 40.086 | | 3.381 | 15.323 | 0.704 |
| 6/17/2005 12:00 | 21.042 | 28.409 | 15.338 | 40.002 | | 3.408 | 15.345 | 0.75 |
| 6/17/2005 16:00 | 21.054 | 28.33 | 15.358 | 39.875 | | 3.391 | 15.341 | 0.799 |
| 6/17/2005 20:00 | 21.087 | 28.279 | 15.392 | 39.783 | | 3.394 | 15.354 | 0.84 |
| 6/18/2005 0:00 | 21.126 | 28.273 | 15.445 | 39.679 | | 3.398 | 15.401 | 0.857 |
| 6/18/2005 4:00 | 21.156 | 28.222 | 15.481 | 39.566 | | 3.398 | 15.405 | 0.864 |
| 6/18/2005 8:00 | 21.203 | 28.222 | 15.537 | 39.469 | | 3.372 | 15.449 | 0.887 |
| 6/18/2005 12:00 | 21.235 | 28.2 | 15.575 | 39.312 | | 3.416 | 15.471 | 0.932 |
| 6/18/2005 16:00 | 21.251 | 28.139 | 15.599 | 39.233 | | 3.445 | 15.455 | 0.977 |
| 6/18/2005 20:00 | 21.256 | 28.113 | 15.636 | 39.042 | | 3.449 | 15.478 | 1.022 |
| 6/19/2005 0:00 | 21.33 | 28.132 | 15.692 | 38.958 | | 3.426 | 15.532 | 1.047 |
| 6/19/2005 4:00 | 21.372 | 28.128 | 15.738 | 38.852 | | 3.42 | 15.552 | 1.054 |
| 6/19/2005 8:00 | 21.422 | 28.128 | 15.786 | 38.737 | | 3.445 | 15.587 | 1.073 |
| 6/19/2005 12:00 | 21.444 | 28.125 | 15.905 | 38.716 | | 3.999 | 15.59 | 1.12 |
| 6/19/2005 16:00 | 21.452 | 28.081 | 15.955 | 38.626 | | 3.993 | 15.598 | 1.165 |
| 6/19/2005 20:00 | 21.491 | 28.09 | 16.024 | 38.536 | | 3.987 | 15.631 | 1.212 |
| 6/20/2005 0:00 | 21.511 | 28.115 | 16.112 | 38.499 | | 3.971 | 15.671 | 1.229 |
| 6/20/2005 4:00 | 21.561 | 28.107 | 16.229 | 38.466 | | 3.965 | 15.68 | 1.232 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 6/20/2005 8:00 | 21.601 | 28.13 | 16.415 | 38.457 | | 3.983 | 15.716 | 1.25 |
| 6/20/2005 12:00 | 21.626 | 28.132 | 16.558 | 38.42 | | 3.999 | 15.726 | 1.293 |
| 6/20/2005 16:00 | 21.613 | 28.072 | 16.624 | 38.346 | | 3.993 | 15.689 | 1.331 |
| 6/20/2005 20:00 | 21.656 | 28.09 | 16.797 | 38.296 | | 4 | 15.741 | 1.39 |
| 6/21/2005 0:00 | 21.688 | 28.115 | 16.974 | 38.312 | | 3.973 | 15.774 | 1.401 |
| 6/21/2005 4:00 | 21.686 | 28.077 | 17.08 | 38.293 | | 3.964 | 15.745 | 1.397 |
| 6/21/2005 8:00 | 21.738 | 28.098 | 17.251 | 38.266 | | 4.105 | 15.782 | 1.414 |
| 6/21/2005 12:00 | 21.678 | 28.043 | 17.322 | 38.176 | | 4.113 | 15.767 | 1.444 |
| 6/21/2005 16:00 | 21.758 | 28.034 | 17.426 | 38.104 | | 4.128 | 15.796 | 1.509 |
| 6/21/2005 20:00 | 21.768 | 28.019 | 17.488 | 38.083 | | 4.115 | 15.792 | 1.546 |
| 6/22/2005 0:00 | 21.802 | 28.053 | 17.585 | 38.023 | | 4.119 | 15.82 | 1.558 |
| 6/22/2005 4:00 | 21.825 | 28.066 | 17.663 | 37.986 | | 4.117 | 15.832 | 1.562 |
| 6/22/2005 8:00 | 21.86 | 28.077 | 17.748 | 37.956 | | 4.125 | 15.848 | 1.571 |
| 6/22/2005 12:00 | 21.87 | 28.119 | 17.805 | 37.887 | | 4.142 | 15.859 | 1.619 |
| 6/22/2005 16:00 | 21.88 | 28.111 | 17.811 | 37.824 | | 4.177 | 15.842 | 1.674 |
| 6/22/2005 20:00 | 21.882 | 28.122 | 17.85 | 37.725 | | 4.167 | 15.851 | 1.726 |
| 6/23/2005 0:00 | 21.909 | 28.145 | 17.916 | 37.642 | | 4.155 | 15.871 | 1.736 |
| 6/23/2005 4:00 | 21.921 | 28.139 | 17.964 | 37.561 | | 4.157 | 15.871 | 1.738 |
| 6/23/2005 8:00 | 21.949 | 28.16 | 18.017 | 37.513 | | 4.148 | 15.878 | 1.74 |
| 6/23/2005 12:00 | 21.946 | 28.149 | 18.037 | 37.487 | | 4.169 | 15.871 | 1.787 |
| 6/23/2005 16:00 | 21.947 | 28.117 | 18.049 | 37.39 | | 4.188 | 15.871 | 1.848 |
| 6/23/2005 20:00 | 21.954 | 28.098 | 18.078 | 37.295 | | 4.165 | 15.879 | 1.897 |
| 6/24/2005 0:00 | 21.984 | 28.128 | 18.137 | 37.24 | | 4.153 | 15.904 | 1.91 |
| 6/24/2005 4:00 | 22.006 | 28.145 | 18.185 | 37.178 | | 4.165 | 15.909 | 1.91 |
| 6/24/2005 8:00 | 22.043 | 28.179 | 18.252 | 37.159 | | 4.153 | 15.936 | 1.918 |
| 6/24/2005 12:00 | 22.058 | 28.198 | 18.292 | 37.092 | | 4.146 | 15.954 | 1.969 |
| 6/24/2005 16:00 | 22.071 | 28.188 | 18.318 | 37.039 | | 4.159 | 15.972 | 2.033 |
| 6/24/2005 20:00 | 22.088 | 28.203 | 18.354 | 36.965 | | 4.173 | 15.987 | 2.082 |
| 6/25/2005 0:00 | 22.13 | 28.267 | 18.446 | 36.912 | | 4.157 | 16.035 | 2.099 |
| 6/25/2005 4:00 | 22.133 | 28.277 | 18.48 | 36.907 | | 4.159 | 16.031 | 2.09 |
| 6/25/2005 8:00 | 22.19 | 28.305 | 18.551 | 36.82 | | 4.147 | 16.064 | 2.097 |
| 6/25/2005 12:00 | 22.212 | 28.333 | 18.607 | 36.792 | | 4.159 | 16.094 | 2.143 |
| 6/25/2005 16:00 | 22.22 | 28.309 | 18.611 | 36.633 | | 4.169 | 16.087 | 2.199 |
| 6/25/2005 20:00 | 22.222 | 28.309 | 18.635 | 36.538 | | 4.165 | 16.103 | 2.237 |
| 6/26/2005 0:00 | 22.275 | 28.377 | 18.718 | 36.427 | | 4.17 | 16.153 | 2.247 |
| 6/26/2005 4:00 | 22.289 | 28.392 | 18.756 | 36.346 | | 4.165 | 16.15 | 2.239 |
| 6/26/2005 8:00 | 22.324 | 28.429 | 18.808 | 36.247 | | 4.167 | 16.171 | 2.242 |
| 6/26/2005 12:00 | 22.331 | 28.431 | 18.848 | 36.182 | | 4.165 | 16.182 | 2.284 |
| 6/26/2005 16:00 | 22.339 | 28.424 | 18.856 | 36.111 | | 4.174 | 16.188 | 2.341 |
| 6/26/2005 20:00 | 22.352 | 28.435 | 18.89 | 36.002 | | 4.181 | 16.211 | 2.384 |
| 6/27/2005 0:00 | 22.389 | 28.482 | 18.969 | 35.903 | | 4.17 | 16.246 | 2.388 |
| 6/27/2005 4:00 | 22.414 | 28.493 | 19.027 | 35.871 | | 4.192 | 16.252 | 2.38 |
| 6/27/2005 8:00 | 22.421 | 28.507 | 19.077 | 35.82 | | 4.188 | 16.258 | 2.376 |
| 6/27/2005 12:00 | 22.443 | 28.488 | 19.101 | 35.753 | | 4.182 | 16.262 | 2.416 |
| 6/27/2005 16:00 | 22.453 | 28.486 | 19.103 | 35.633 | | 4.209 | 16.269 | 2.471 |
| 6/27/2005 20:00 | 22.476 | 28.488 | 19.143 | 35.499 | | 4.2 | 16.308 | 2.521 |
| 6/28/2005 0:00 | 22.5 | 28.516 | 19.21 | 35.49 | | 4.196 | 16.339 | 2.518 |
| 6/28/2005 4:00 | 22.535 | 28.533 | 19.262 | 35.441 | | 4.186 | 16.356 | 2.516 |
| 6/28/2005 8:00 | 22.555 | 28.527 | 19.286 | 35.404 | | 4.186 | 16.337 | 2.493 |
| 6/28/2005 12:00 | 22.548 | 28.543 | 19.318 | 35.404 | | 4.2 | 16.341 | 2.521 |
| 6/28/2005 16:00 | 22.562 | 28.544 | 19.316 | 35.282 | | 4.231 | 16.356 | 2.568 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 6/28/2005 20:00 | 22.58 | 28.569 | 19.35 | 35.238 | | 4.23 | 16.385 | 2.602 |
| 6/29/2005 0:00 | 22.6 | 28.61 | 19.403 | 35.212 | | 4.201 | 16.411 | 2.599 |
| 6/29/2005 4:00 | 22.582 | 28.618 | 19.401 | 35.178 | | 4.2 | 16.372 | 2.578 |
| 6/29/2005 8:00 | 22.62 | 28.631 | 19.427 | 35.079 | | 4.192 | 16.36 | 2.576 |
| 6/29/2005 12:00 | 22.624 | 28.653 | 19.461 | 35.056 | | 4.211 | 16.384 | 2.61 |
| 6/29/2005 16:00 | 22.627 | 28.674 | 19.469 | 34.998 | | 4.222 | 16.395 | 2.659 |
| 6/29/2005 20:00 | 22.657 | 28.712 | 19.503 | 34.922 | | 4.213 | 16.418 | 2.689 |
| 6/30/2005 0:00 | 22.711 | 28.84 | 19.624 | 34.949 | | 4.199 | 16.509 | 2.7 |
| 6/30/2005 4:00 | 22.736 | 28.874 | 19.682 | 34.963 | | 4.19 | 16.523 | 2.683 |
| 6/30/2005 8:00 | 22.756 | 28.942 | 19.749 | 35.007 | | 4.197 | 16.548 | 2.681 |
| 6/30/2005 12:00 | 22.758 | 28.962 | 19.773 | 35.026 | | 4.199 | 16.521 | 2.662 |
| 6/30/2005 16:00 | 22.768 | 28.966 | 19.775 | 34.982 | | 4.196 | 16.511 | 2.658 |
| 6/30/2005 20:00 | 22.776 | 28.981 | 19.792 | 34.894 | | 4.192 | 16.509 | 2.666 |
| 7/1/2005 0:00 | 22.811 | 29.028 | 19.859 | 34.94 | | 4.188 | 16.55 | 2.662 |
| 7/1/2005 4:00 | 22.82 | 29.058 | 19.891 | 34.917 | | 4.186 | 16.548 | 2.649 |
| 7/1/2005 8:00 | 22.858 | 29.12 | 19.974 | 34.938 | | 4.186 | 16.6 | 2.656 |
| 7/1/2005 12:00 | 22.878 | 29.156 | 20.024 | 34.966 | | 4.191 | 16.633 | 2.681 |
| 7/1/2005 16:00 | 22.86 | 29.132 | 19.99 | 34.88 | | 4.221 | 16.591 | 2.713 |
| 7/1/2005 20:00 | 22.868 | 29.158 | 20.018 | 34.862 | | 4.228 | 16.608 | 2.745 |
| 7/2/2005 0:00 | 22.88 | 29.196 | 20.066 | 34.841 | | 4.207 | 16.616 | 2.741 |
| 7/2/2005 4:00 | 22.883 | 29.222 | 20.09 | 34.813 | | 4.192 | 16.616 | 2.73 |
| 7/2/2005 8:00 | 22.892 | 29.256 | 20.143 | 34.769 | | 4.219 | 16.631 | 2.728 |
| 7/2/2005 12:00 | 22.9 | 29.261 | 20.155 | 34.76 | | 4.209 | 16.618 | 2.747 |
| 7/2/2005 16:00 | 22.902 | 29.252 | 20.141 | 34.718 | | 4.205 | 16.602 | 2.787 |
| 7/2/2005 20:00 | 22.907 | 29.267 | 20.163 | 34.635 | | 4.222 | 16.608 | 2.815 |
| 7/3/2005 0:00 | 22.912 | 29.307 | 20.217 | 34.654 | | 4.224 | 16.623 | 2.811 |
| 7/3/2005 4:00 | 22.912 | 29.288 | 20.207 | 34.575 | | 4.199 | 16.567 | 2.79 |
| 7/3/2005 8:00 | 22.907 | 29.312 | 20.235 | 34.529 | | 4.197 | 16.552 | 2.779 |
| 7/3/2005 12:00 | 22.952 | 29.361 | 20.326 | 34.541 | | 4.223 | 16.61 | 2.811 |
| 7/3/2005 16:00 | 22.959 | 29.382 | 20.37 | 34.515 | | 4.228 | 16.637 | 2.847 |
| 7/3/2005 20:00 | 22.992 | 29.421 | 20.442 | 34.561 | | 4.209 | 16.671 | 2.86 |
| 7/4/2005 0:00 | 23.051 | 29.5 | 20.563 | 34.608 | | 4.23 | 16.739 | 2.864 |
| 7/4/2005 4:00 | 23.076 | 29.523 | 20.601 | 34.61 | | 4.213 | 16.718 | 2.85 |
| 7/4/2005 8:00 | 23.126 | 29.589 | 20.728 | 34.688 | | 4.207 | 16.792 | 2.858 |
| 7/4/2005 12:00 | 23.146 | 29.617 | 20.79 | 34.705 | | 4.224 | 16.805 | 2.871 |
| 7/4/2005 16:00 | 23.163 | 29.66 | 20.85 | 34.753 | | 4.24 | 16.834 | 2.913 |
| 7/4/2005 20:00 | 23.213 | 29.713 | 20.941 | 34.772 | | 4.244 | 16.89 | 2.945 |
| 7/5/2005 0:00 | 23.242 | 29.77 | 21.043 | 34.815 | | 4.248 | 16.919 | 2.943 |
| 7/5/2005 4:00 | 23.247 | 29.77 | 21.082 | 34.809 | | 4.23 | 16.89 | 2.926 |
| 7/5/2005 8:00 | 23.28 | 29.805 | 21.176 | 34.813 | | 4.228 | 16.919 | 2.924 |
| 7/5/2005 12:00 | 23.299 | 29.845 | 21.268 | 34.825 | | 4.251 | 16.962 | 2.964 |
| 7/5/2005 16:00 | 23.299 | 29.815 | 21.274 | 34.802 | | 4.247 | 16.946 | 3.003 |
| 7/5/2005 20:00 | 23.309 | 29.839 | 21.303 | 34.751 | | 4.242 | 16.944 | 3.024 |
| 7/6/2005 0:00 | 23.327 | 29.873 | 21.387 | 34.746 | | 4.254 | 16.962 | 3.015 |
| 7/6/2005 4:00 | 23.334 | 29.869 | 21.421 | 34.723 | | 4.257 | 16.94 | 3.005 |
| 7/6/2005 8:00 | 23.364 | 29.896 | 21.497 | 34.695 | | 4.242 | 16.95 | 3.001 |
| 7/6/2005 12:00 | 23.376 | 29.917 | 21.578 | 34.725 | | 4.254 | 16.979 | 3.018 |
| 7/6/2005 16:00 | 23.371 | 29.93 | 21.586 | 34.714 | | 4.271 | 16.971 | 3.062 |
| 7/6/2005 20:00 | 23.396 | 29.975 | 21.632 | 34.679 | | 4.261 | 16.979 | 3.091 |
| 7/7/2005 0:00 | 23.419 | 30.02 | 21.743 | 34.675 | | 4.255 | 17.02 | 3.087 |
| 7/7/2005 4:00 | 23.419 | 30.02 | 21.775 | 34.695 | | 4.244 | 16.991 | 3.068 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 7/7/2005 8:00 | 23.451 | 30.058 | 21.865 | 34.712 | | 4.23 | 17.017 | 3.064 |
| 7/7/2005 12:00 | 23.471 | 30.082 | 21.922 | 34.737 | | 4.254 | 17.035 | 3.1 |
| 7/7/2005 16:00 | 23.463 | 30.076 | 21.94 | 34.665 | | 4.279 | 17.039 | 3.142 |
| 7/7/2005 20:00 | 23.483 | 30.084 | 21.972 | 34.668 | | 4.271 | 17.052 | 3.171 |
| 7/8/2005 0:00 | 23.515 | 30.135 | 22.08 | 34.675 | | 4.269 | 17.097 | 3.167 |
| 7/8/2005 4:00 | 23.533 | 30.139 | 22.121 | 34.709 | | 4.265 | 17.079 | 3.148 |
| 7/8/2005 8:00 | 23.562 | 30.195 | 22.227 | 34.753 | | 4.281 | 17.114 | 3.146 |
| 7/8/2005 12:00 | 23.555 | 30.19 | 22.231 | 34.725 | | 4.282 | 17.089 | 3.181 |
| 7/8/2005 16:00 | 23.56 | 30.208 | 22.271 | 34.712 | | 4.296 | 17.118 | 3.228 |
| 7/8/2005 20:00 | 23.585 | 30.237 | 22.293 | 34.679 | | 4.28 | 17.124 | 3.255 |
| 7/9/2005 0:00 | 23.61 | 30.303 | 22.392 | 34.679 | | 4.274 | 17.155 | 3.249 |
| 7/9/2005 4:00 | 23.617 | 30.31 | 22.436 | 34.718 | | 4.263 | 17.141 | 3.234 |
| 7/9/2005 8:00 | 23.649 | 30.357 | 22.526 | 34.737 | | 4.259 | 17.17 | 3.232 |
| 7/9/2005 12:00 | 23.679 | 30.397 | 22.589 | 34.776 | | 4.274 | 17.193 | 3.264 |
| 7/9/2005 16:00 | 23.667 | 30.378 | 22.573 | 34.7 | | 4.296 | 17.18 | 3.308 |
| 7/9/2005 20:00 | 23.682 | 30.391 | 22.603 | 34.695 | | 4.282 | 17.187 | 3.338 |
| 7/10/2005 0:00 | 23.721 | 30.463 | 22.711 | 34.737 | | 4.267 | 17.24 | 3.332 |
| 7/10/2005 4:00 | 23.709 | 30.481 | 22.757 | 34.753 | | 4.276 | 17.228 | 3.313 |
| 7/10/2005 8:00 | 23.763 | 30.523 | 22.834 | 34.744 | | 4.283 | 17.245 | 3.304 |
| 7/10/2005 12:00 | 23.771 | 30.536 | 22.876 | 34.792 | | 4.292 | 17.253 | 3.336 |
| 7/10/2005 16:00 | 23.763 | 30.545 | 22.886 | 34.765 | | 4.308 | 17.265 | 3.381 |
| 7/10/2005 20:00 | 23.771 | 30.557 | 22.91 | 34.723 | | 4.296 | 17.273 | 3.406 |
| 7/11/2005 0:00 | 23.801 | 30.581 | 22.971 | 34.73 | | 4.294 | 17.278 | 3.393 |
| 7/11/2005 4:00 | 23.818 | 30.577 | 23.015 | 34.746 | | 4.296 | 17.271 | 3.377 |
| 7/11/2005 8:00 | 23.853 | 30.606 | 23.114 | 34.781 | | 4.284 | 17.309 | 3.368 |
| 7/11/2005 12:00 | 23.858 | 30.591 | 23.142 | 34.767 | | 4.288 | 17.311 | 3.396 |
| 7/11/2005 16:00 | 23.865 | 30.583 | 23.156 | 34.748 | | 4.319 | 17.327 | 3.44 |
| 7/11/2005 20:00 | 23.89 | 30.57 | 23.198 | 34.774 | | 4.298 | 17.357 | 3.47 |
| 7/12/2005 0:00 | 23.907 | 30.585 | 23.278 | 34.811 | | 4.284 | 17.381 | 3.457 |
| 7/12/2005 4:00 | 23.94 | 30.6 | 23.337 | 34.806 | | 4.296 | 17.387 | 3.445 |
| 7/12/2005 8:00 | 23.969 | 30.632 | 23.419 | 34.882 | | 4.29 | 17.412 | 3.432 |
| 7/12/2005 12:00 | 23.984 | 30.645 | 23.445 | 34.906 | | 4.317 | 17.422 | 3.451 |
| 7/12/2005 16:00 | 23.992 | 30.647 | 23.439 | 34.88 | | 4.327 | 17.431 | 3.502 |
| 7/12/2005 20:00 | 23.942 | 30.653 | 23.475 | 34.889 | | 4.263 | 17.321 | 3.483 |
| 7/13/2005 0:00 | 23.95 | 30.67 | 23.538 | 34.892 | | 4.274 | 17.35 | 3.468 |
| 7/13/2005 4:00 | 23.937 | 30.673 | 23.562 | 34.931 | | 4.274 | 17.352 | 3.452 |
| 7/13/2005 8:00 | 23.947 | 30.69 | 23.616 | 34.947 | | 4.271 | 17.369 | 3.441 |
| 7/13/2005 12:00 | 23.947 | 30.696 | 23.648 | 34.956 | | 4.313 | 17.384 | 3.464 |
| 7/13/2005 16:00 | 23.93 | 30.685 | 23.636 | 34.926 | | 4.3 | 17.384 | 3.503 |
| 7/13/2005 20:00 | 23.895 | 30.683 | 23.624 | 34.882 | | 4.319 | 17.381 | 3.522 |
| 7/14/2005 0:00 | 23.909 | 30.717 | 23.68 | 34.873 | | 4.29 | 17.39 | 3.511 |
| 7/14/2005 4:00 | 23.902 | 30.728 | 23.698 | 34.896 | | 4.273 | 17.384 | 3.494 |
| 7/14/2005 8:00 | 23.922 | 30.769 | 23.757 | 34.924 | | 4.296 | 17.406 | 3.482 |
| 7/14/2005 12:00 | 23.924 | 30.777 | 23.787 | 34.926 | | 4.306 | 17.408 | 3.507 |
| 7/14/2005 16:00 | 23.917 | 30.783 | 23.781 | 34.901 | | 4.321 | 17.413 | 3.547 |
| 7/14/2005 20:00 | 23.929 | 30.803 | 23.797 | 34.882 | | 4.319 | 17.427 | 3.569 |
| 7/15/2005 0:00 | 23.964 | 30.856 | 23.879 | 34.889 | | 4.299 | 17.468 | 3.556 |
| 7/15/2005 4:00 | 23.991 | 30.884 | 23.916 | 34.952 | | 4.294 | 17.464 | 3.539 |
| 7/15/2005 8:00 | 23.996 | 30.929 | 23.988 | 34.993 | | 4.292 | 17.491 | 3.529 |
| 7/15/2005 12:00 | 24.026 | 30.95 | 24.012 | 34.982 | | 4.299 | 17.501 | 3.556 |
| 7/15/2005 16:00 | 24.026 | 30.941 | 23.994 | 34.989 | | 4.315 | 17.501 | 3.594 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 7/15/2005 20:00 | 24.036 | 30.971 | 24.002 | 34.938 | | 4.302 | 17.52 | 3.622 |
| 7/16/2005 0:00 | 24.068 | 31.025 | 24.069 | 34.968 | | 4.302 | 17.543 | 3.61 |
| 7/16/2005 4:00 | 24.078 | 31.044 | 24.084 | 34.975 | | 4.292 | 17.53 | 3.588 |
| 7/16/2005 8:00 | 24.103 | 31.082 | 24.133 | 34.998 | | 4.293 | 17.545 | 3.578 |
| 7/16/2005 12:00 | 24.118 | 31.089 | 24.149 | 35.016 | | 4.311 | 17.551 | 3.612 |
| 7/16/2005 16:00 | 24.096 | 31.089 | 24.113 | 35.023 | | 4.323 | 17.547 | 3.652 |
| 7/16/2005 20:00 | 24.106 | 31.103 | 24.105 | 34.972 | | 4.325 | 17.555 | 3.68 |
| 7/17/2005 0:00 | 24.125 | 31.14 | 24.153 | 34.966 | | 4.315 | 17.572 | 3.669 |
| 7/17/2005 4:00 | 24.11 | 31.153 | 24.151 | 34.966 | | 4.315 | 17.549 | 3.648 |
| 7/17/2005 8:00 | 24.158 | 31.182 | 24.203 | 34.972 | | 4.302 | 17.57 | 3.637 |
| 7/17/2005 12:00 | 24.17 | 31.197 | 24.203 | 34.977 | | 4.311 | 17.566 | 3.669 |
| 7/17/2005 16:00 | 24.163 | 31.195 | 24.179 | 34.947 | | 4.337 | 17.574 | 3.712 |
| 7/17/2005 20:00 | 24.185 | 31.204 | 24.177 | 34.922 | | 4.311 | 17.584 | 3.735 |
| 7/18/2005 0:00 | 24.212 | 31.24 | 24.231 | 34.931 | | 4.319 | 17.607 | 3.725 |
| 7/18/2005 4:00 | 24.143 | 31.266 | 24.368 | 35.053 | | 4.24 | 17.162 | 3.644 |
| 7/18/2005 8:00 | 24.001 | 31.219 | 24.398 | 35.088 | | 4.259 | 16.914 | 3.587 |
| 7/18/2005 12:00 | 23.892 | 31.148 | 24.376 | 35.139 | | 4.249 | 16.927 | 3.57 |
| 7/18/2005 16:00 | 23.805 | 31.093 | 24.34 | 35.15 | | 4.269 | 17.021 | 3.601 |
| 7/18/2005 20:00 | 23.76 | 31.058 | 24.332 | 35.134 | | 4.267 | 17.098 | 3.629 |
| 7/19/2005 0:00 | 23.74 | 31.056 | 24.36 | 35.169 | | 4.28 | 17.168 | 3.614 |
| 7/19/2005 4:00 | 23.717 | 31.048 | 24.372 | 35.185 | | 4.249 | 17.2 | 3.595 |
| 7/19/2005 8:00 | 23.7 | 31.054 | 24.394 | 35.199 | | 4.278 | 17.224 | 3.578 |
| 7/19/2005 12:00 | 23.7 | 31.059 | 24.41 | 35.213 | | 4.28 | 17.241 | 3.576 |
| 7/19/2005 16:00 | 23.658 | 31.016 | 24.337 | 35.111 | | 4.296 | 17.2 | 3.589 |
| 7/19/2005 20:00 | 23.668 | 31.022 | 24.338 | 35.109 | | 4.276 | 17.225 | 3.606 |
| 7/20/2005 0:00 | 23.678 | 31.039 | 24.365 | 35.116 | | 4.274 | 17.245 | 3.589 |
| 7/20/2005 4:00 | 23.678 | 31.031 | 24.348 | 35.09 | | 4.274 | 17.229 | 3.568 |
| 7/20/2005 8:00 | 23.693 | 31.056 | 24.376 | 35.095 | | 4.276 | 17.251 | 3.558 |
| 7/20/2005 12:00 | 23.702 | 31.084 | 24.402 | 35.093 | | 4.292 | 17.283 | 3.589 |
| 7/20/2005 16:00 | 23.7 | 31.073 | 24.376 | 35.111 | | 4.294 | 17.293 | 3.628 |
| 7/20/2005 20:00 | 23.72 | 31.095 | 24.392 | 35.1 | | 4.292 | 17.332 | 3.66 |
| 7/21/2005 0:00 | 23.774 | 31.139 | 24.458 | 35.127 | | 4.273 | 17.373 | 3.649 |
| 7/21/2005 4:00 | 23.812 | 31.182 | 24.524 | 35.187 | | 4.278 | 17.417 | 3.643 |
| 7/21/2005 8:00 | 23.814 | 31.206 | 24.547 | 35.233 | | 4.284 | 17.419 | 3.624 |
| 7/21/2005 12:00 | 23.862 | 31.227 | 24.557 | 35.254 | | 4.288 | 17.427 | 3.641 |
| 7/21/2005 16:00 | 23.881 | 31.255 | 24.579 | 35.275 | | 4.313 | 17.465 | 3.679 |
| 7/21/2005 20:00 | 23.899 | 31.259 | 24.565 | 35.257 | | 4.294 | 17.46 | 3.692 |
| 7/22/2005 0:00 | 23.933 | 31.308 | 24.625 | 35.268 | | 4.29 | 17.5 | 3.681 |
| 7/22/2005 4:00 | 23.948 | 31.323 | 24.633 | 35.312 | | 4.296 | 17.483 | 3.66 |
| 7/22/2005 8:00 | 23.976 | 31.366 | 24.683 | 35.349 | | 4.29 | 17.506 | 3.643 |
| 7/22/2005 12:00 | 24.01 | 31.396 | 24.713 | 35.363 | | 4.313 | 17.543 | 3.66 |
| 7/22/2005 16:00 | 23.991 | 31.394 | 24.681 | 35.358 | | 4.335 | 17.535 | 3.694 |
| 7/22/2005 20:00 | 24.025 | 31.404 | 24.679 | 35.31 | | 4.323 | 17.558 | 3.726 |
| 7/23/2005 0:00 | 24.058 | 31.451 | 24.72 | 35.365 | | 4.319 | 17.579 | 3.718 |
| 7/23/2005 4:00 | 24.072 | 31.47 | 24.725 | 35.36 | | 4.315 | 17.568 | 3.696 |
| 7/23/2005 8:00 | 24.1 | 31.496 | 24.742 | 35.367 | | 4.309 | 17.574 | 3.686 |
| 7/23/2005 12:00 | 24.118 | 31.528 | 24.768 | 35.393 | | 4.311 | 17.607 | 3.735 |
| 7/23/2005 16:00 | 24.127 | 31.543 | 24.716 | 35.351 | | 4.315 | 17.597 | 3.777 |
| 7/23/2005 20:00 | 24.14 | 31.57 | 24.718 | 35.326 | | 4.305 | 17.624 | 3.805 |
| 7/24/2005 0:00 | 24.174 | 31.617 | 24.768 | 35.351 | | 4.303 | 17.649 | 3.794 |
| 7/24/2005 4:00 | 24.189 | 31.643 | 24.794 | 35.354 | | 4.296 | 17.647 | 3.775 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 7/24/2005 8:00 | 24.227 | 31.669 | 24.838 | 35.414 | | 4.313 | 17.665 | 3.767 |
| 7/24/2005 12:00 | 24.247 | 31.666 | 24.836 | 35.39 | | 4.319 | 17.669 | 3.807 |
| 7/24/2005 16:00 | 24.247 | 31.671 | 24.814 | 35.367 | | 4.317 | 17.682 | 3.85 |
| 7/24/2005 20:00 | 24.261 | 31.679 | 24.804 | 35.379 | | 4.323 | 17.682 | 3.875 |
| 7/25/2005 0:00 | 24.286 | 31.739 | 24.85 | 35.407 | | 4.306 | 17.715 | 3.858 |
| 7/25/2005 4:00 | 24.289 | 31.75 | 24.834 | 35.39 | | 4.299 | 17.684 | 3.839 |
| 7/25/2005 8:00 | 24.309 | 31.782 | 24.852 | 35.393 | | 4.302 | 17.686 | 3.829 |
| 7/25/2005 12:00 | 24.299 | 31.788 | 24.832 | 35.335 | | 4.311 | 17.676 | 3.865 |
| 7/25/2005 16:00 | 24.296 | 31.769 | 24.806 | 35.31 | | 4.335 | 17.691 | 3.912 |
| 7/25/2005 20:00 | 24.323 | 31.743 | 24.768 | 35.261 | | 4.331 | 17.684 | 3.931 |
| 7/26/2005 0:00 | 24.343 | 31.807 | 24.872 | 35.337 | | 4.311 | 17.744 | 3.918 |
| 7/26/2005 4:00 | 24.008 | 31.745 | 24.78 | 35.388 | | 3.931 | 16.889 | 3.576 |
| 7/26/2005 8:00 | 23.525 | 31.585 | 24.723 | 35.393 | | 3.587 | 16.046 | 3.338 |
| 7/26/2005 12:00 | 23.159 | 31.447 | 24.464 | 35.434 | | 3.191 | 15.456 | 3.074 |
| 7/26/2005 16:00 | 23.025 | 31.323 | 24.083 | 35.557 | | 3.427 | 15.398 | 3.057 |
| 7/26/2005 20:00 | 22.933 | 31.21 | 23.798 | 35.624 | | 3.689 | 15.696 | 3.093 |
| 7/27/2005 0:00 | 22.869 | 31.124 | 23.599 | 35.684 | | 3.87 | 15.957 | 3.115 |
| 7/27/2005 4:00 | 22.817 | 31.035 | 23.41 | 35.698 | | 3.993 | 16.118 | 3.123 |
| 7/27/2005 8:00 | 22.79 | 30.969 | 23.255 | 35.758 | | 4.055 | 16.246 | 3.127 |
| 7/27/2005 12:00 | 22.738 | 30.892 | 23.07 | 35.76 | | 4.109 | 16.313 | 3.151 |
| 7/27/2005 16:00 | 22.718 | 30.806 | 22.851 | 35.693 | | 4.144 | 16.342 | 3.183 |
| 7/27/2005 20:00 | 22.703 | 30.755 | 22.67 | 35.628 | | 4.166 | 16.385 | 3.206 |
| 7/28/2005 0:00 | 22.716 | 30.738 | 22.561 | 35.64 | | 4.17 | 16.441 | 3.204 |
| 7/28/2005 4:00 | 22.723 | 30.708 | 22.421 | 35.624 | | 4.183 | 16.47 | 3.19 |
| 7/28/2005 8:00 | 22.738 | 30.706 | 22.334 | 35.626 | | 4.179 | 16.52 | 3.181 |
| 7/28/2005 12:00 | 22.756 | 30.682 | 22.218 | 35.584 | | 4.205 | 16.54 | 3.207 |
| 7/28/2005 16:00 | 22.765 | 30.646 | 22.079 | 35.561 | | 4.214 | 16.542 | 3.243 |
| 7/28/2005 20:00 | 22.773 | 30.634 | 21.988 | 35.49 | | 4.193 | 16.567 | 3.264 |
| 7/29/2005 0:00 | 22.8 | 30.644 | 21.956 | 35.515 | | 4.203 | 16.598 | 3.254 |
| 7/29/2005 4:00 | 22.798 | 30.627 | 21.886 | 35.464 | | 4.181 | 16.598 | 3.228 |
| 7/29/2005 8:00 | 22.882 | 30.679 | 21.956 | 35.506 | | 4.183 | 16.689 | 3.232 |
| 7/29/2005 12:00 | 22.883 | 30.687 | 21.944 | 35.548 | | 4.205 | 16.704 | 3.247 |
| 7/29/2005 16:00 | 22.917 | 30.642 | 21.851 | 35.497 | | 4.199 | 16.676 | 3.288 |
| 7/29/2005 20:00 | 22.92 | 30.655 | 21.849 | 35.462 | | 4.212 | 16.708 | 3.309 |
| 7/30/2005 0:00 | 22.96 | 30.681 | 21.897 | 35.504 | | 4.198 | 16.745 | 3.294 |
| 7/30/2005 4:00 | 22.979 | 30.689 | 21.928 | 35.501 | | 4.2 | 16.757 | 3.28 |
| 7/30/2005 8:00 | 23.007 | 30.708 | 21.982 | 35.501 | | 4.216 | 16.78 | 3.271 |
| 7/30/2005 12:00 | 23.027 | 30.721 | 22.03 | 35.483 | | 4.222 | 16.793 | 3.294 |
| 7/30/2005 16:00 | 23.027 | 30.696 | 22.012 | 35.446 | | 4.226 | 16.776 | 3.339 |
| 7/30/2005 20:00 | 23.046 | 30.694 | 22.036 | 35.395 | | 4.226 | 16.78 | 3.36 |
| 7/31/2005 0:00 | 23.076 | 30.732 | 22.14 | 35.37 | | 4.218 | 16.824 | 3.352 |
| 7/31/2005 4:00 | 23.091 | 30.738 | 22.191 | 35.397 | | 4.212 | 16.813 | 3.333 |
| 7/31/2005 8:00 | 23.118 | 30.766 | 22.277 | 35.39 | | 4.22 | 16.84 | 3.322 |
| 7/31/2005 12:00 | 23.131 | 30.764 | 22.334 | 35.37 | | 4.222 | 16.822 | 3.339 |
| 7/31/2005 16:00 | 23.128 | 30.743 | 22.351 | 35.28 | | 4.231 | 16.801 | 3.378 |
| 7/31/2005 20:00 | 23.151 | 30.768 | 22.438 | 35.257 | | 4.247 | 16.83 | 3.405 |
| 8/1/2005 0:00 | 23.185 | 30.796 | 22.551 | 35.259 | | 4.234 | 16.855 | 3.395 |
| 8/1/2005 4:00 | 23.208 | 30.817 | 22.639 | 35.227 | | 4.24 | 16.863 | 3.38 |
| 8/1/2005 8:00 | 23.243 | 30.847 | 22.735 | 35.268 | | 4.232 | 16.88 | 3.369 |
| 8/1/2005 12:00 | 23.253 | 30.849 | 22.791 | 35.257 | | 4.245 | 16.879 | 3.399 |
| 8/1/2005 16:00 | 23.263 | 30.858 | 22.84 | 35.22 | | 4.238 | 16.898 | 3.44 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 8/1/2005 20:00 | 23.278 | 30.86 | 22.874 | 35.148 | | 4.245 | 16.892 | 3.455 |
| 8/2/2005 0:00 | 23.297 | 30.9 | 22.98 | 35.164 | | 4.23 | 16.923 | 3.446 |
| 8/2/2005 4:00 | 23.33 | 30.913 | 23.048 | 35.19 | | 4.234 | 16.927 | 3.435 |
| 8/2/2005 8:00 | 23.37 | 30.937 | 23.135 | 35.176 | | 4.241 | 16.946 | 3.429 |
| 8/2/2005 12:00 | 23.382 | 30.937 | 23.187 | 35.215 | | 4.256 | 16.954 | 3.459 |
| 8/2/2005 16:00 | 23.379 | 30.903 | 23.181 | 35.157 | | 4.257 | 16.942 | 3.499 |
| 8/2/2005 20:00 | 23.397 | 30.909 | 23.219 | 35.127 | | 4.259 | 16.954 | 3.514 |
| 8/3/2005 0:00 | 23.429 | 30.937 | 23.3 | 35.12 | | 4.252 | 16.981 | 3.512 |
| 8/3/2005 4:00 | 23.452 | 30.958 | 23.368 | 35.136 | | 4.246 | 16.987 | 3.499 |
| 8/3/2005 8:00 | 23.501 | 31.003 | 23.471 | 35.157 | | 4.256 | 17.033 | 3.498 |
| 8/3/2005 12:00 | 23.511 | 31.007 | 23.501 | 35.192 | | 4.275 | 17.039 | 3.523 |
| 8/3/2005 16:00 | 23.526 | 31.016 | 23.525 | 35.173 | | 4.285 | 17.058 | 3.57 |
| 8/3/2005 20:00 | 23.548 | 31.033 | 23.557 | 35.155 | | 4.289 | 17.08 | 3.597 |
| 8/4/2005 0:00 | 23.59 | 31.088 | 23.654 | 35.19 | | 4.265 | 17.126 | 3.593 |
| 8/4/2005 4:00 | 23.655 | 31.154 | 23.78 | 35.238 | | 4.269 | 17.188 | 3.591 |
| 8/4/2005 8:00 | 23.712 | 31.214 | 23.901 | 35.335 | | 4.274 | 17.24 | 3.585 |
| 8/4/2005 12:00 | 23.759 | 31.248 | 23.981 | 35.427 | | 4.29 | 17.273 | 3.602 |
| 8/4/2005 16:00 | 23.784 | 31.272 | 24.034 | 35.478 | | 4.304 | 17.295 | 3.632 |
| 8/4/2005 20:00 | 23.824 | 31.312 | 24.112 | 35.508 | | 4.3 | 17.35 | 3.662 |
| 8/5/2005 0:00 | 23.869 | 31.37 | 24.211 | 35.575 | | 4.281 | 17.395 | 3.653 |
| 8/5/2005 4:00 | 23.891 | 31.376 | 24.217 | 35.561 | | 4.306 | 17.37 | 3.632 |
| 8/5/2005 8:00 | 23.933 | 31.423 | 24.291 | 35.631 | | 4.29 | 17.403 | 3.626 |
| 8/5/2005 12:00 | 23.946 | 31.442 | 24.321 | 35.654 | | 4.294 | 17.405 | 3.64 |
| 8/5/2005 16:00 | 23.936 | 31.427 | 24.291 | 35.612 | | 4.313 | 17.391 | 3.675 |
| 8/5/2005 20:00 | 23.941 | 31.415 | 24.261 | 35.527 | | 4.292 | 17.368 | 3.694 |
| 8/6/2005 0:00 | 23.973 | 31.453 | 24.325 | 35.561 | | 4.287 | 17.401 | 3.685 |
| 8/6/2005 4:00 | 23.965 | 31.447 | 24.327 | 35.55 | | 4.29 | 17.38 | 3.666 |
| 8/6/2005 8:00 | 23.993 | 31.47 | 24.365 | 35.55 | | 4.292 | 17.393 | 3.658 |
| 8/6/2005 12:00 | 23.973 | 31.474 | 24.367 | 35.548 | | 4.283 | 17.385 | 3.677 |
| 8/6/2005 16:00 | 23.98 | 31.453 | 24.313 | 35.483 | | 4.298 | 17.362 | 3.713 |
| 8/6/2005 20:00 | 23.99 | 31.464 | 24.315 | 35.425 | | 4.314 | 17.374 | 3.741 |
| 8/7/2005 0:00 | 24.02 | 31.509 | 24.375 | 35.418 | | 4.298 | 17.401 | 3.73 |
| 8/7/2005 4:00 | 24.025 | 31.517 | 24.379 | 35.411 | | 4.31 | 17.382 | 3.711 |
| 8/7/2005 8:00 | 24.053 | 31.562 | 24.44 | 35.43 | | 4.285 | 17.414 | 3.707 |
| 8/7/2005 12:00 | 24.072 | 31.583 | 24.466 | 35.476 | | 4.302 | 17.428 | 3.737 |
| 8/7/2005 16:00 | 24.068 | 31.575 | 24.434 | 35.439 | | 4.337 | 17.416 | 3.777 |
| 8/7/2005 20:00 | 24.087 | 31.596 | 24.452 | 35.409 | | 4.331 | 17.444 | 3.792 |
| 8/8/2005 0:00 | 24.12 | 31.645 | 24.522 | 35.42 | | 4.31 | 17.477 | 3.786 |
| 8/8/2005 4:00 | 24.137 | 31.662 | 24.54 | 35.453 | | 4.314 | 17.459 | 3.771 |
| 8/8/2005 8:00 | 24.157 | 31.688 | 24.57 | 35.467 | | 4.294 | 17.472 | 3.761 |
| 8/8/2005 12:00 | 24.184 | 31.741 | 24.619 | 35.499 | | 4.304 | 17.5 | 3.778 |
| 8/8/2005 16:00 | 24.189 | 31.735 | 24.588 | 35.467 | | 4.308 | 17.494 | 3.814 |
| 8/8/2005 20:00 | 24.194 | 31.745 | 24.592 | 35.444 | | 4.297 | 17.505 | 3.825 |
| 8/9/2005 0:00 | 24.226 | 31.784 | 24.653 | 35.448 | | 4.296 | 17.532 | 3.818 |
| 8/9/2005 4:00 | 24.238 | 31.797 | 24.665 | 35.474 | | 4.294 | 17.525 | 3.808 |
| 8/9/2005 8:00 | 24.268 | 31.843 | 24.737 | 35.511 | | 4.3 | 17.561 | 3.804 |
| 8/9/2005 12:00 | 24.286 | 31.854 | 24.749 | 35.534 | | 4.302 | 17.571 | 3.842 |
| 8/9/2005 16:00 | 24.296 | 31.856 | 24.737 | 35.478 | | 4.323 | 17.592 | 3.893 |
| 8/9/2005 20:00 | 24.313 | 31.871 | 24.733 | 35.453 | | 4.341 | 17.608 | 3.921 |
| 8/10/2005 0:00 | 24.358 | 31.933 | 24.824 | 35.541 | | 4.333 | 17.656 | 3.914 |
| 8/10/2005 4:00 | 24.383 | 31.95 | 24.85 | 35.538 | | 4.306 | 17.656 | 3.902 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 8/10/2005 8:00 | 24.405 | 31.98 | 24.902 | 35.603 | | 4.331 | 17.675 | 3.893 |
| 8/10/2005 12:00 | 24.427 | 31.993 | 24.93 | 35.638 | | 4.355 | 17.697 | 3.938 |
| 8/10/2005 16:00 | 24.43 | 31.984 | 24.894 | 35.575 | | 4.343 | 17.693 | 3.983 |
| 8/10/2005 20:00 | 24.442 | 31.995 | 24.9 | 35.55 | | 4.351 | 17.718 | 4.004 |
| 8/11/2005 0:00 | 24.47 | 32.033 | 24.956 | 35.614 | | 4.349 | 17.741 | 3.994 |
| 8/11/2005 4:00 | 24.484 | 32.048 | 24.972 | 35.594 | | 4.347 | 17.724 | 3.981 |
| 8/11/2005 8:00 | 24.507 | 32.074 | 25.006 | 35.638 | | 4.332 | 17.747 | 3.977 |
| 8/11/2005 12:00 | 24.512 | 32.082 | 25.001 | 35.608 | | 4.345 | 17.737 | 4.002 |
| 8/11/2005 16:00 | 24.519 | 32.095 | 24.995 | 35.608 | | 4.378 | 17.763 | 4.041 |
| 8/11/2005 20:00 | 24.514 | 32.106 | 24.989 | 35.582 | | 4.336 | 17.755 | 4.041 |
| 8/12/2005 0:00 | 24.561 | 32.149 | 25.053 | 35.621 | | 4.343 | 17.788 | 4.032 |
| 8/12/2005 4:00 | 24.586 | 32.189 | 25.105 | 35.661 | | 4.345 | 17.803 | 4.022 |
| 8/12/2005 8:00 | 24.613 | 32.223 | 25.147 | 35.703 | | 4.345 | 17.813 | 4.007 |
| 8/12/2005 12:00 | 24.651 | 32.277 | 25.218 | 35.716 | | 4.349 | 17.852 | 4.011 |
| 8/12/2005 16:00 | 24.644 | 32.266 | 25.188 | 35.718 | | 4.353 | 17.821 | 4.009 |
| 8/12/2005 20:00 | 24.661 | 32.283 | 25.2 | 35.742 | | 4.345 | 17.832 | 4.013 |
| 8/13/2005 0:00 | 24.661 | 32.317 | 25.246 | 35.772 | | 4.349 | 17.852 | 4.002 |
| 8/13/2005 4:00 | 24.579 | 32.296 | 25.236 | 35.765 | | 4.299 | 17.687 | 3.971 |
| 8/13/2005 8:00 | 24.457 | 32.255 | 25.264 | 35.79 | | 4.266 | 17.062 | 3.922 |
| 8/13/2005 12:00 | 24.244 | 32.183 | 25.276 | 35.829 | | 4.066 | 16.907 | 3.854 |
| 8/13/2005 16:00 | 23.829 | 32.033 | 25.214 | 35.804 | | 3.747 | 16.261 | 3.694 |
| 8/13/2005 20:00 | 23.725 | 31.939 | 25.22 | 35.875 | | 3.784 | 16.303 | 3.648 |
| 8/14/2005 0:00 | 23.631 | 31.869 | 25.163 | 35.894 | | 3.939 | 16.52 | 3.639 |
| 8/14/2005 4:00 | 23.557 | 31.805 | 25.013 | 35.912 | | 4.06 | 16.64 | 3.633 |
| 8/14/2005 8:00 | 23.527 | 31.786 | 24.918 | 35.984 | | 4.145 | 16.774 | 3.631 |
| 8/14/2005 12:00 | 23.495 | 31.76 | 24.792 | 36.028 | | 4.17 | 16.863 | 3.639 |
| 8/14/2005 16:00 | 23.455 | 31.715 | 24.633 | 36.012 | | 4.211 | 16.909 | 3.671 |
| 8/14/2005 20:00 | 23.463 | 31.687 | 24.503 | 36 | | 4.237 | 16.954 | 3.693 |
| 8/15/2005 0:00 | 23.468 | 31.696 | 24.455 | 36.032 | | 4.241 | 17.021 | 3.688 |
| 8/15/2005 4:00 | 23.488 | 31.687 | 24.388 | 36.053 | | 4.247 | 17.056 | 3.669 |
| 8/15/2005 8:00 | 23.508 | 31.696 | 24.33 | 36.065 | | 4.254 | 17.081 | 3.657 |
| 8/15/2005 12:00 | 23.51 | 31.707 | 24.268 | 36.046 | | 4.253 | 17.106 | 3.665 |
| 8/15/2005 16:00 | 23.488 | 31.681 | 24.173 | 36.03 | | 4.277 | 17.104 | 3.697 |
| 8/15/2005 20:00 | 23.527 | 31.685 | 24.145 | 36.009 | | 4.258 | 17.134 | 3.718 |
| 8/16/2005 0:00 | 23.563 | 31.715 | 24.181 | 36.037 | | 4.258 | 17.182 | 3.708 |
| 8/16/2005 4:00 | 23.58 | 31.717 | 24.181 | 36.037 | | 4.253 | 17.19 | 3.691 |
| 8/16/2005 8:00 | 23.612 | 31.741 | 24.219 | 36.026 | | 4.24 | 17.225 | 3.678 |
| 8/16/2005 12:00 | 23.61 | 31.758 | 24.237 | 36.046 | | 4.27 | 17.238 | 3.68 |
| 8/16/2005 16:00 | 23.634 | 31.732 | 24.185 | 35.996 | | 4.262 | 17.207 | 3.717 |
| 8/16/2005 20:00 | 23.642 | 31.734 | 24.189 | 35.993 | | 4.272 | 17.236 | 3.734 |
| 8/17/2005 0:00 | 23.667 | 31.756 | 24.227 | 35.996 | | 4.266 | 17.256 | 3.723 |
| 8/17/2005 4:00 | 23.664 | 31.741 | 24.217 | 35.966 | | 4.245 | 17.232 | 3.702 |
| 8/17/2005 8:00 | 23.679 | 31.739 | 24.217 | 35.924 | | 4.241 | 17.219 | 3.685 |
| 8/17/2005 12:00 | 23.659 | 31.726 | 24.21 | 35.857 | | 4.266 | 17.199 | 3.683 |
| 8/17/2005 16:00 | 23.647 | 31.69 | 24.156 | 35.799 | | 4.256 | 17.155 | 3.691 |
| 8/17/2005 20:00 | 23.644 | 31.67 | 24.142 | 35.742 | | 4.235 | 17.136 | 3.689 |
| 8/18/2005 0:00 | 23.659 | 31.696 | 24.198 | 35.696 | | 4.243 | 17.163 | 3.679 |
| 8/18/2005 4:00 | 23.667 | 31.702 | 24.234 | 35.681 | | 4.221 | 17.174 | 3.675 |
| 8/18/2005 8:00 | 23.699 | 31.709 | 24.264 | 35.672 | | 4.241 | 17.178 | 3.66 |
| 8/18/2005 12:00 | 23.714 | 31.73 | 24.319 | 35.695 | | 4.245 | 17.213 | 3.69 |
| 8/18/2005 16:00 | 23.747 | 31.734 | 24.339 | 35.663 | | 4.288 | 17.234 | 3.724 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 8/18/2005 20:00 | 23.776 | 31.751 | 24.377 | 35.698 | | 4.263 | 17.263 | 3.749 |
| 8/19/2005 0:00 | 23.771 | 31.807 | 24.478 | 35.733 | | 4.245 | 17.275 | 3.734 |
| 8/19/2005 4:00 | 23.552 | 31.764 | 24.503 | 35.776 | | 3.494 | 16.481 | 3.649 |
| 8/19/2005 8:00 | 23.5 | 31.717 | 24.51 | 35.792 | | 3.73 | 16.566 | 3.62 |
| 8/19/2005 12:00 | 23.44 | 31.67 | 24.457 | 35.834 | | 3.925 | 16.655 | 3.624 |
| 8/19/2005 16:00 | 23.388 | 31.653 | 24.437 | 35.832 | | 4.061 | 16.752 | 3.639 |
| 8/19/2005 20:00 | 22.884 | 31.651 | 24.468 | 35.903 | | 3 | 16.762 | 3.584 |
| 8/20/2005 0:00 | 22.9 | 31.523 | 24.351 | 35.924 | | 2.48 | 15.796 | 3.358 |
| 8/20/2005 4:00 | 22.81 | 31.397 | 24.156 | 35.961 | | 3.049 | 15.87 | 3.316 |
| 8/20/2005 8:00 | 22.743 | 31.318 | 23.955 | 36.002 | | 3.414 | 16.042 | 3.307 |
| 8/20/2005 12:00 | 22.718 | 31.254 | 23.779 | 36.056 | | 3.657 | 16.169 | 3.318 |
| 8/20/2005 16:00 | 22.663 | 31.163 | 23.539 | 36.016 | | 3.814 | 16.224 | 3.352 |
| 8/20/2005 20:00 | 22.636 | 31.107 | 23.36 | 35.984 | | 3.952 | 16.309 | 3.375 |
| 8/21/2005 0:00 | 22.648 | 31.084 | 23.24 | 36.046 | | 4.012 | 16.39 | 3.363 |
| 8/21/2005 4:00 | 22.671 | 31.045 | 23.101 | 36.044 | | 4.059 | 16.427 | 3.348 |
| 8/21/2005 8:00 | 22.698 | 31.028 | 22.997 | 36.023 | | 4.07 | 16.479 | 3.337 |
| 8/21/2005 12:00 | 22.713 | 31.006 | 22.896 | 36.03 | | 4.086 | 16.514 | 3.35 |
| 8/21/2005 16:00 | 22.706 | 30.96 | 22.731 | 35.984 | | 4.094 | 16.51 | 3.371 |
| 8/21/2005 20:00 | 22.701 | 30.926 | 22.613 | 35.947 | | 4.109 | 16.52 | 3.382 |
| 8/22/2005 0:00 | 22.752 | 30.93 | 22.58 | 35.947 | | 4.123 | 16.562 | 3.367 |
| 8/22/2005 4:00 | 22.763 | 30.909 | 22.504 | 35.915 | | 4.107 | 16.561 | 3.346 |
| 8/22/2005 8:00 | 22.8 | 30.921 | 22.512 | 35.922 | | 4.111 | 16.609 | 3.34 |
| 8/22/2005 12:00 | 22.825 | 30.926 | 22.506 | 35.929 | | 4.141 | 16.634 | 3.346 |
| 8/22/2005 16:00 | 22.82 | 30.887 | 22.433 | 35.883 | | 4.136 | 16.598 | 3.365 |
| 8/22/2005 20:00 | 22.837 | 30.879 | 22.419 | 35.806 | | 4.15 | 16.623 | 3.359 |
| 8/23/2005 0:00 | 22.862 | 30.909 | 22.474 | 35.85 | | 4.149 | 16.669 | 3.352 |
| 8/23/2005 4:00 | 22.897 | 30.904 | 22.492 | 35.843 | | 4.158 | 16.675 | 3.338 |
| 8/23/2005 8:00 | 22.932 | 30.924 | 22.544 | 35.838 | | 4.149 | 16.7 | 3.329 |
| 8/23/2005 12:00 | 22.949 | 30.938 | 22.6 | 35.85 | | 4.166 | 16.723 | 3.34 |
| 8/23/2005 16:00 | 22.982 | 30.938 | 22.636 | 35.829 | | 4.172 | 16.733 | 3.359 |
| 8/23/2005 20:00 | 23.004 | 30.949 | 22.682 | 35.822 | | 4.166 | 16.745 | 3.357 |
| 8/24/2005 0:00 | 23.034 | 30.983 | 22.787 | 35.843 | | 4.174 | 16.783 | 3.351 |
| 8/24/2005 4:00 | 23.053 | 30.99 | 22.857 | 35.829 | | 4.16 | 16.796 | 3.343 |
| 8/24/2005 8:00 | 23.078 | 30.996 | 22.914 | 35.827 | | 4.174 | 16.795 | 3.328 |
| 8/24/2005 12:00 | 23.108 | 31.013 | 22.994 | 35.795 | | 4.187 | 16.814 | 3.33 |
| 8/24/2005 16:00 | 23.108 | 31.026 | 23.054 | 35.781 | | 4.176 | 16.832 | 3.349 |
| 8/24/2005 20:00 | 23.148 | 31.028 | 23.104 | 35.76 | | 4.18 | 16.828 | 3.34 |
| 8/25/2005 0:00 | 23.183 | 31.052 | 23.191 | 35.802 | | 4.183 | 16.851 | 3.332 |
| 8/25/2005 4:00 | 23.202 | 31.067 | 23.261 | 35.767 | | 4.168 | 16.865 | 3.324 |
| 8/25/2005 8:00 | 23.24 | 31.094 | 23.35 | 35.788 | | 4.174 | 16.893 | 3.317 |
| 8/25/2005 12:00 | 23.255 | 31.116 | 23.428 | 35.834 | | 4.277 | 16.911 | 3.332 |
| 8/25/2005 16:00 | 23.272 | 31.107 | 23.446 | 35.774 | | 4.284 | 16.909 | 3.373 |
| 8/25/2005 20:00 | 23.297 | 31.124 | 23.49 | 35.742 | | 4.302 | 16.923 | 3.392 |
| 8/26/2005 0:00 | 23.319 | 31.148 | 23.565 | 35.788 | | 4.289 | 16.942 | 3.383 |
| 8/26/2005 4:00 | 23.28 | 31.096 | 23.508 | 35.719 | | 4.188 | 16.863 | 3.356 |
| 8/26/2005 8:00 | 23.076 | 31.092 | 23.575 | 35.709 | | 3.434 | 16.067 | 3.26 |
| 8/26/2005 12:00 | 22.991 | 31.058 | 23.619 | 35.728 | | 3.679 | 16.071 | 3.237 |
| 8/26/2005 16:00 | 22.917 | 30.988 | 23.561 | 35.691 | | 3.86 | 16.185 | 3.258 |
| 8/26/2005 20:00 | 22.884 | 30.951 | 23.538 | 35.663 | | 4.03 | 16.278 | 3.284 |
| 8/27/2005 0:00 | 22.874 | 30.953 | 23.574 | 35.672 | | 4.079 | 16.383 | 3.273 |
| 8/27/2005 4:00 | 22.867 | 30.934 | 23.556 | 35.714 | | 4.163 | 16.431 | 3.254 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 8/27/2005 8:00 | 22.877 | 30.934 | 23.567 | 35.728 | | 4.17 | 16.485 | 3.245 |
| 8/27/2005 12:00 | 22.869 | 30.915 | 23.548 | 35.705 | | 4.192 | 16.51 | 3.26 |
| 8/27/2005 16:00 | 22.87 | 30.887 | 23.496 | 35.668 | | 4.215 | 16.522 | 3.307 |
| 8/27/2005 20:00 | 22.889 | 30.885 | 23.492 | 35.64 | | 4.244 | 16.556 | 3.339 |
| 8/28/2005 0:00 | 22.91 | 30.909 | 23.526 | 35.686 | | 4.213 | 16.599 | 3.331 |
| 8/28/2005 4:00 | 22.927 | 30.906 | 23.525 | 35.659 | | 4.244 | 16.611 | 3.314 |
| 8/28/2005 8:00 | 22.964 | 30.919 | 23.552 | 35.691 | | 4.237 | 16.636 | 3.303 |
| 8/28/2005 12:00 | 23.004 | 30.949 | 23.607 | 35.693 | | 4.264 | 16.685 | 3.314 |
| 8/28/2005 16:00 | 22.996 | 30.936 | 23.595 | 35.716 | | 4.252 | 16.683 | 3.342 |
| 8/28/2005 20:00 | 23.009 | 30.938 | 23.607 | 35.721 | | 4.274 | 16.615 | 3.346 |
| 8/29/2005 0:00 | 23.046 | 30.988 | 23.711 | 35.767 | | 4.256 | 16.679 | 3.346 |
| 8/29/2005 4:00 | 23.044 | 30.977 | 23.719 | 35.758 | | 4.278 | 16.684 | 3.331 |
| 8/29/2005 8:00 | 23.071 | 30.998 | 23.769 | 35.742 | | 4.26 | 16.723 | 3.321 |
| 8/29/2005 12:00 | 23.076 | 31.005 | 23.8 | 35.758 | | 4.274 | 16.741 | 3.333 |
| 8/29/2005 16:00 | 23.066 | 30.971 | 23.757 | 35.691 | | 4.32 | 16.714 | 3.372 |
| 8/29/2005 20:00 | 23.086 | 30.966 | 23.761 | 35.682 | | 4.326 | 16.727 | 3.391 |
| 8/30/2005 0:00 | 23.098 | 30.994 | 23.808 | 35.693 | | 4.322 | 16.756 | 3.383 |
| 8/30/2005 4:00 | 23.113 | 30.998 | 23.82 | 35.67 | | 4.32 | 16.756 | 3.366 |
| 8/30/2005 8:00 | 23.148 | 31.028 | 23.874 | 35.654 | | 4.33 | 16.785 | 3.357 |
| 8/30/2005 12:00 | 23.163 | 31.041 | 23.902 | 35.665 | | 4.328 | 16.8 | 3.372 |
| 8/30/2005 16:00 | 23.168 | 31.032 | 23.89 | 35.658 | | 4.344 | 16.801 | 3.419 |
| 8/30/2005 20:00 | 23.202 | 31.049 | 23.922 | 35.645 | | 4.289 | 16.834 | 3.443 |
| 8/31/2005 0:00 | 23.24 | 31.086 | 23.987 | 35.679 | | 4.291 | 16.868 | 3.434 |
| 8/31/2005 4:00 | 23.272 | 31.109 | 24.041 | 35.707 | | 4.274 | 16.897 | 3.421 |
| 8/31/2005 8:00 | 23.332 | 31.158 | 24.137 | 35.73 | | 4.375 | 16.954 | 3.417 |
| 8/31/2005 12:00 | 23.362 | 31.188 | 24.178 | 35.769 | | 4.388 | 16.976 | 3.445 |
| 8/31/2005 16:00 | 23.404 | 31.209 | 24.214 | 35.781 | | 4.408 | 17.002 | 3.494 |
| 8/31/2005 20:00 | 23.426 | 31.256 | 24.282 | 35.822 | | 4.389 | 17.06 | 3.52 |
| 9/1/2005 0:00 | 23.491 | 31.318 | 24.369 | 35.926 | | 4.389 | 17.104 | 3.515 |
| 9/1/2005 4:00 | 23.528 | 31.363 | 24.427 | 35.982 | | 4.4 | 17.135 | 3.507 |
| 9/1/2005 8:00 | 23.582 | 31.419 | 24.51 | 36.03 | | 4.387 | 17.185 | 3.505 |
| 9/1/2005 12:00 | 23.607 | 31.444 | 24.552 | 36.079 | | 4.4 | 17.207 | 3.522 |
| 9/1/2005 16:00 | 23.585 | 31.433 | 24.522 | 36.053 | | 4.422 | 17.185 | 3.56 |
| 9/1/2005 20:00 | 23.637 | 31.453 | 24.54 | 36.039 | | 4.412 | 17.213 | 3.584 |
| 9/2/2005 0:00 | 23.667 | 31.495 | 24.606 | 36.081 | | 4.397 | 17.25 | 3.575 |
| 9/2/2005 4:00 | 23.704 | 31.54 | 24.678 | 36.099 | | 4.387 | 17.292 | 3.573 |
| 9/2/2005 8:00 | 23.699 | 31.561 | 24.723 | 36.174 | | 4.389 | 17.192 | 3.552 |
| 9/2/2005 12:00 | 23.672 | 31.561 | 24.771 | 36.185 | | 4.378 | 16.994 | 3.548 |
| 9/2/2005 16:00 | 23.592 | 31.508 | 24.725 | 36.162 | | 4.395 | 16.994 | 3.537 |
| 9/2/2005 20:00 | 23.585 | 31.48 | 24.725 | 36.139 | | 4.383 | 17.029 | 3.554 |
| 9/3/2005 0:00 | 23.585 | 31.506 | 24.793 | 36.176 | | 4.383 | 17.097 | 3.546 |
| 9/3/2005 4:00 | 23.575 | 31.506 | 24.815 | 36.19 | | 4.383 | 17.12 | 3.531 |
| 9/3/2005 8:00 | 23.568 | 31.517 | 24.862 | 36.176 | | 4.352 | 17.163 | 3.522 |
| 9/3/2005 12:00 | 23.508 | 31.487 | 24.851 | 36.206 | | 4.312 | 16.69 | 3.508 |
| 9/3/2005 16:00 | 23.429 | 31.423 | 24.781 | 36.15 | | 4.341 | 16.776 | 3.537 |
| 9/3/2005 20:00 | 23.404 | 31.389 | 24.755 | 36.058 | | 4.333 | 16.841 | 3.552 |
| 9/4/2005 0:00 | 23.391 | 31.404 | 24.805 | 36.113 | | 4.35 | 16.913 | 3.54 |
| 9/4/2005 4:00 | 23.357 | 31.397 | 24.819 | 36.113 | | 4.337 | 16.944 | 3.523 |
| 9/4/2005 8:00 | 23.379 | 31.41 | 24.857 | 36.104 | | 4.354 | 16.988 | 3.508 |
| 9/4/2005 12:00 | 23.381 | 31.421 | 24.869 | 36.123 | | 4.372 | 17.014 | 3.521 |
| 9/4/2005 16:00 | 23.401 | 31.401 | 24.839 | 36.083 | | 4.374 | 17.019 | 3.561 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 9/4/2005 20:00 | 23.419 | 31.427 | 24.855 | 36.097 | | 4.374 | 17.058 | 3.587 |
| 9/5/2005 0:00 | 23.453 | 31.465 | 24.9 | 36.107 | | 4.38 | 17.098 | 3.578 |
| 9/5/2005 4:00 | 23.461 | 31.476 | 24.908 | 36.123 | | 4.366 | 17.108 | 3.563 |
| 9/5/2005 8:00 | 23.493 | 31.5 | 24.934 | 36.157 | | 4.366 | 17.135 | 3.553 |
| 9/5/2005 12:00 | 23.508 | 31.523 | 24.956 | 36.153 | | 4.396 | 17.162 | 3.583 |
| 9/5/2005 16:00 | 23.52 | 31.517 | 24.924 | 36.155 | | 4.397 | 17.168 | 3.628 |
| 9/5/2005 20:00 | 23.55 | 31.529 | 24.932 | 36.136 | | 4.397 | 17.193 | 3.647 |
| 9/6/2005 0:00 | 23.568 | 31.564 | 24.968 | 36.141 | | 4.399 | 17.22 | 3.636 |
| 9/6/2005 4:00 | 23.597 | 31.579 | 24.978 | 36.164 | | 4.376 | 17.228 | 3.623 |
| 9/6/2005 8:00 | 23.64 | 31.619 | 25.042 | 36.196 | | 4.396 | 17.278 | 3.619 |
| 9/6/2005 12:00 | 23.677 | 31.662 | 25.097 | 36.236 | | 4.39 | 17.317 | 3.634 |
| 9/6/2005 16:00 | 23.69 | 31.651 | 25.06 | 36.208 | | 4.411 | 17.308 | 3.664 |
| 9/6/2005 20:00 | 23.714 | 31.677 | 25.089 | 36.226 | | 4.39 | 17.339 | 3.671 |
| 9/7/2005 0:00 | 23.734 | 31.719 | 25.149 | 36.252 | | 4.38 | 17.377 | 3.662 |
| 9/7/2005 4:00 | 23.766 | 31.722 | 25.143 | 36.261 | | 4.398 | 17.36 | 3.645 |
| 9/7/2005 8:00 | 23.796 | 31.743 | 25.167 | 36.266 | | 4.396 | 17.383 | 3.637 |
| 9/7/2005 12:00 | 23.809 | 31.76 | 25.181 | 36.277 | | 4.411 | 17.387 | 3.637 |
| 9/7/2005 16:00 | 23.809 | 31.743 | 25.131 | 36.226 | | 4.433 | 17.374 | 3.675 |
| 9/7/2005 20:00 | 23.826 | 31.758 | 25.133 | 36.224 | | 4.394 | 17.393 | 3.696 |
| 9/8/2005 0:00 | 23.856 | 31.79 | 25.171 | 36.243 | | 4.41 | 17.416 | 3.684 |
| 9/8/2005 4:00 | 23.868 | 31.792 | 25.161 | 36.199 | | 4.411 | 17.401 | 3.667 |
| 9/8/2005 8:00 | 23.868 | 31.809 | 25.183 | 36.224 | | 4.365 | 17.325 | 3.65 |
| 9/8/2005 12:00 | 23.848 | 31.794 | 25.165 | 36.201 | | 4.381 | 17.246 | 3.665 |
| 9/8/2005 16:00 | 23.828 | 31.76 | 25.111 | 36.129 | | 4.41 | 17.252 | 3.71 |
| 9/8/2005 20:00 | 23.824 | 31.758 | 25.113 | 36.12 | | 4.41 | 17.274 | 3.716 |
| 9/9/2005 0:00 | 23.836 | 31.783 | 25.149 | 36.129 | | 4.404 | 17.3 | 3.71 |
| 9/9/2005 4:00 | 23.853 | 31.803 | 25.175 | 36.143 | | 4.391 | 17.329 | 3.701 |
| 9/9/2005 8:00 | 23.866 | 31.832 | 25.227 | 36.174 | | 4.375 | 17.37 | 3.695 |
| 9/9/2005 12:00 | 23.879 | 31.862 | 25.245 | 36.203 | | 4.381 | 17.385 | 3.72 |
| 9/9/2005 16:00 | 23.881 | 31.847 | 25.215 | 36.141 | | 4.377 | 17.389 | 3.763 |
| 9/9/2005 20:00 | 23.903 | 31.86 | 25.227 | 36.157 | | 4.385 | 17.414 | 3.785 |
| 9/10/2005 0:00 | 23.933 | 31.896 | 25.283 | 36.166 | | 4.41 | 17.451 | 3.776 |
| 9/10/2005 4:00 | 23.945 | 31.911 | 25.296 | 36.206 | | 4.41 | 17.453 | 3.757 |
| 9/10/2005 8:00 | 23.972 | 31.937 | 25.332 | 36.222 | | 4.403 | 17.474 | 3.75 |
| 9/10/2005 12:00 | 23.995 | 31.952 | 25.344 | 36.247 | | 4.387 | 17.474 | 3.778 |
| 9/10/2005 16:00 | 24.007 | 31.954 | 25.338 | 36.233 | | 4.409 | 17.507 | 3.823 |
| 9/10/2005 20:00 | 24.029 | 31.975 | 25.358 | 36.233 | | 4.407 | 17.536 | 3.844 |
| 9/11/2005 0:00 | 24.064 | 32.014 | 25.412 | 36.238 | | 4.43 | 17.567 | 3.832 |
| 9/11/2005 4:00 | 24.089 | 32.039 | 25.442 | 36.291 | | 4.414 | 17.582 | 3.821 |
| 9/11/2005 8:00 | 24.137 | 32.084 | 25.509 | 36.342 | | 4.407 | 17.621 | 3.815 |
| 9/11/2005 12:00 | 24.154 | 32.103 | 25.535 | 36.388 | | 4.426 | 17.641 | 3.836 |
| 9/11/2005 16:00 | 24.144 | 32.078 | 25.469 | 36.321 | | 4.412 | 17.609 | 3.864 |
| 9/11/2005 20:00 | 24.174 | 32.095 | 25.483 | 36.326 | | 4.428 | 17.637 | 3.881 |
| 9/12/2005 0:00 | 24.196 | 32.138 | 25.535 | 36.365 | | 4.438 | 17.668 | 3.87 |
| 9/12/2005 4:00 | 24.209 | 32.146 | 25.527 | 36.36 | | 4.416 | 17.654 | 3.858 |
| 9/12/2005 8:00 | 24.223 | 32.163 | 25.545 | 36.363 | | 4.405 | 17.66 | 3.845 |
| 9/12/2005 12:00 | 24.171 | 32.161 | 25.521 | 36.342 | | 4.417 | 17.645 | 3.856 |
| 9/12/2005 16:00 | 24.206 | 32.131 | 25.444 | 36.27 | | 4.421 | | 3.888 |
| 9/12/2005 20:00 | 24.233 | 32.148 | 25.456 | 36.21 | | 4.428 | 17.665 | 3.907 |
| 9/13/2005 0:00 | 24.245 | 32.176 | 25.473 | 36.241 | | 4.413 | 17.595 | 3.896 |
| 9/13/2005 4:00 | 24.248 | 32.187 | 25.477 | 36.233 | | 4.397 | 17.561 | 3.888 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 9/13/2005 8:00 | | 32.221 | 25.513 | 36.226 | | 4.409 | 17.562 | 3.877 |
| 9/13/2005 12:00 | 24.34 | 32.251 | 25.545 | 36.252 | | 4.438 | 17.67 | 3.888 |
| 9/13/2005 16:00 | 24.339 | 32.283 | | 36.245 | | 4.428 | 17.794 | 3.912 |
| 9/13/2005 20:00 | 24.36 | 32.327 | 25.798 | | | 4.438 | 17.747 | 3.924 |
| 9/14/2005 0:00 | 24.422 | 32.406 | 25.818 | | | 4.407 | 17.647 | 3.92 |
| 9/14/2005 4:00 | 24.455 | 32.445 | 25.853 | 37.132 | | 4.424 | 17.67 | 3.909 |
| 9/14/2005 8:00 | 24.501 | 32.49 | 25.898 | 36.868 | | | 17.678 | 3.901 |
| 9/14/2005 12:00 | 24.511 | 32.511 | 25.934 | 36.835 | | | 17.761 | 3.918 |
| 9/14/2005 16:00 | 24.514 | 32.257 | 25.88 | 37.046 | | 4.594 | 17.953 | |
| 9/14/2005 20:00 | 24.556 | 32.235 | 25.888 | 36.858 | | 4.485 | 17.831 | 4.005 |
| 9/15/2005 0:00 | 24.558 | 32.243 | 25.926 | 36.775 | | 4.485 | 17.751 | 3.961 |
| 9/15/2005 4:00 | 24.57 | 32.257 | 25.957 | 36.768 | | 4.427 | 17.755 | 3.95 |
| 9/15/2005 8:00 | 24.616 | 32.272 | 25.995 | 36.719 | | 4.406 | 17.784 | 3.943 |
| 9/15/2005 12:00 | 24.623 | 32.274 | 26.039 | 36.793 | | 4.39 | 17.813 | 3.932 |
| 9/15/2005 16:00 | 24.638 | 32.253 | 26.021 | 36.767 | | 4.369 | 17.815 | 3.936 |
| 9/15/2005 20:00 | 24.67 | 32.291 | 26.086 | 36.765 | | 4.363 | 17.85 | 3.955 |
| 9/16/2005 0:00 | 24.71 | 32.325 | 26.146 | 36.848 | | 4.355 | 17.804 | 3.944 |
| 9/16/2005 4:00 | 24.722 | 32.34 | 26.164 | 36.874 | | 4.332 | 17.774 | 3.932 |
| 9/16/2005 8:00 | 24.769 | 32.387 | 26.232 | 36.878 | | 4.361 | 17.931 | 3.929 |
| 9/16/2005 12:00 | 24.782 | 32.411 | 26.266 | 36.961 | | 4.326 | 17.875 | 3.93 |
| 9/16/2005 16:00 | 24.745 | 32.377 | 26.196 | 36.887 | | 4.334 | 17.941 | 3.957 |
| 9/16/2005 20:00 | 24.772 | 32.379 | 26.186 | 36.864 | | 4.293 | 17.894 | 3.976 |
| 9/17/2005 0:00 | 24.789 | 32.402 | 26.212 | 36.862 | | 4.253 | 17.902 | 3.968 |
| 9/17/2005 4:00 | 24.772 | 32.398 | 26.198 | 36.862 | | 4.231 | 17.857 | 3.951 |
| 9/17/2005 8:00 | 24.787 | 32.409 | 26.196 | 36.832 | | 4.223 | 17.836 | 3.938 |
| 9/17/2005 12:00 | 24.767 | 32.402 | 26.168 | 36.779 | | 4.206 | 17.877 | 3.941 |
| 9/17/2005 16:00 | 24.757 | 32.366 | 26.09 | 36.73 | | 4.212 | 17.987 | 3.968 |
| 9/17/2005 20:00 | 24.779 | 32.404 | 26.128 | 36.696 | | 4.152 | 17.974 | 3.983 |
| 9/18/2005 0:00 | 24.807 | 32.438 | 26.172 | 36.709 | | 4.14 | 17.91 | 3.979 |
| 9/18/2005 4:00 | 24.794 | 32.445 | 26.172 | 36.702 | | 4.146 | 17.877 | 3.964 |
| 9/18/2005 8:00 | 24.829 | 32.47 | 26.2 | 36.679 | | 4.105 | 17.885 | 3.958 |
| 9/18/2005 12:00 | 24.859 | 32.505 | 26.246 | 36.763 | | 4.159 | 18.053 | 3.975 |
| 9/18/2005 16:00 | 24.844 | 32.494 | 26.208 | 36.714 | | 4.156 | 18.186 | 4.005 |
| 9/18/2005 20:00 | 24.872 | 32.515 | 26.222 | 36.737 | | 4.148 | 18.15 | 4.009 |
| 9/19/2005 0:00 | 24.906 | 32.537 | 26.246 | 36.735 | | 4.142 | 18.167 | 4.001 |
| 9/19/2005 4:00 | 24.936 | 32.596 | 26.339 | 36.804 | | 4.107 | 18.109 | 3.996 |
| 9/19/2005 8:00 | 24.981 | 32.658 | 26.436 | 36.848 | | 4.117 | 18.086 | 3.998 |
| 9/19/2005 12:00 | 25.005 | 32.675 | 26.476 | 36.943 | | 4.129 | 18.224 | 4.003 |
| 9/19/2005 16:00 | 25.02 | 32.673 | 26.474 | 36.957 | | 4.146 | 18.342 | 4.031 |
| 9/19/2005 20:00 | 25.023 | 32.716 | 26.55 | 37.005 | | 4.125 | 18.301 | 4.045 |
| 9/20/2005 0:00 | 25.087 | 32.765 | 26.635 | 37.077 | | 4.133 | 18.173 | 4.043 |
| 9/20/2005 4:00 | 25.129 | 32.797 | 26.689 | 37.144 | | 4.139 | 18.175 | 4.035 |
| 9/20/2005 8:00 | 25.157 | 32.816 | 26.731 | 37.187 | | 4.129 | 18.179 | 4.028 |
| 9/20/2005 12:00 | 25.171 | 32.829 | 26.749 | 37.229 | | 4.156 | 18.215 | 4.05 |
| 9/20/2005 16:00 | 25.137 | 32.799 | 26.689 | 37.157 | | 4.158 | 18.539 | 4.09 |
| 9/20/2005 20:00 | 25.157 | 32.81 | 26.687 | 37.167 | | 4.143 | 18.382 | 4.112 |
| 9/21/2005 0:00 | 25.184 | 32.833 | 26.715 | 37.148 | | 4.154 | 18.421 | 4.101 |
| 9/21/2005 4:00 | 25.159 | 32.831 | 26.709 | 37.164 | | 4.158 | 18.315 | 4.088 |
| 9/21/2005 8:00 | 25.172 | 32.818 | 26.679 | 37.137 | | 4.168 | 18.275 | 4.069 |
| 9/21/2005 12:00 | 25.154 | 32.809 | 26.642 | 37.065 | | 4.16 | 18.274 | 4.082 |
| 9/21/2005 16:00 | 25.109 | 32.773 | 26.562 | 37.021 | | 4.18 | 18.612 | 4.123 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 9/21/2005 20:00 | 25.137 | 32.782 | 26.554 | 36.938 | | 4.194 | 18.448 | 4.133 |
| 9/22/2005 0:00 | 25.125 | 32.795 | 26.562 | 36.957 | | 4.184 | 18.32 | 4.125 |
| 9/22/2005 4:00 | 25.177 | 32.842 | 26.632 | 36.952 | | 4.18 | 18.27 | 4.125 |
| 9/22/2005 8:00 | 25.214 | 32.882 | 26.695 | 36.993 | | 4.196 | 18.395 | 4.121 |
| 9/22/2005 12:00 | 25.244 | 32.916 | 26.775 | 37.095 | | 4.192 | 18.483 | 4.133 |
| 9/22/2005 16:00 | 25.269 | 32.923 | 26.785 | 37.123 | | 4.19 | 18.68 | 4.176 |
| 9/22/2005 20:00 | 25.318 | 32.976 | 26.886 | 37.194 | | 4.19 | 18.466 | 4.191 |
| 9/23/2005 0:00 | 25.353 | 33.01 | 26.944 | 37.266 | | 4.232 | 18.512 | 4.185 |
| 9/23/2005 4:00 | 25.373 | 33.029 | 26.972 | 37.308 | | 4.234 | 18.425 | 4.174 |
| 9/23/2005 8:00 | 25.39 | 33.057 | 27.013 | 37.34 | | 4.229 | 18.38 | 4.168 |
| 9/23/2005 12:00 | 25.398 | 33.061 | 27.033 | 37.381 | | 4.232 | 18.38 | 4.159 |
| 9/23/2005 16:00 | 25.383 | 33.038 | 26.982 | 37.356 | | 4.239 | 18.45 | 4.155 |
| 9/23/2005 20:00 | 25.398 | 33.057 | 26.999 | 37.345 | | 4.239 | 18.436 | 4.162 |
| 9/24/2005 0:00 | 25.398 | 33.07 | 27.013 | 37.354 | | 4.231 | 18.404 | 4.151 |
| 9/24/2005 4:00 | 25.393 | 33.063 | 26.986 | 37.335 | | 4.243 | 18.39 | 4.134 |
| 9/24/2005 8:00 | 25.405 | 33.074 | 26.997 | 37.317 | | 4.237 | 18.404 | 4.125 |
| 9/24/2005 12:00 | 25.417 | 33.091 | 27.021 | 37.301 | | 4.243 | 18.543 | 4.128 |
| 9/24/2005 16:00 | 25.395 | 33.061 | 26.952 | 37.287 | | 4.233 | 18.667 | 4.172 |
| 9/24/2005 20:00 | 25.417 | 33.095 | 26.987 | 37.245 | | 4.25 | 18.601 | 4.194 |
| 9/25/2005 0:00 | 25.432 | 33.114 | 27.011 | 37.294 | | 4.243 | 18.483 | 4.179 |
| 9/25/2005 4:00 | 25.44 | 33.114 | 26.997 | 37.261 | | 4.214 | 18.411 | 4.166 |
| 9/25/2005 8:00 | 25.415 | 33.155 | 27.067 | 37.312 | | 4.212 | 18.591 | 4.158 |
| 9/25/2005 12:00 | 25.457 | 33.149 | 27.043 | 37.324 | | 4.2 | 18.578 | 4.149 |
| 9/25/2005 16:00 | 25.447 | 33.129 | 27.001 | 37.287 | | 4.235 | 18.903 | 4.192 |
| 9/25/2005 20:00 | 25.484 | 33.17 | 27.069 | 37.301 | | 4.239 | 18.795 | 4.218 |
| 9/26/2005 0:00 | 25.542 | 33.247 | 27.202 | 37.384 | | 4.231 | 18.601 | 4.213 |
| 9/26/2005 4:00 | 25.584 | 33.305 | 27.312 | 37.483 | | 4.218 | 18.717 | 4.209 |
| 9/26/2005 8:00 | 25.64 | 33.362 | 27.435 | 37.599 | | 4.239 | 18.628 | 4.209 |
| 9/26/2005 12:00 | 25.658 | 33.371 | 27.487 | 37.675 | | 4.233 | 18.704 | 4.209 |
| 9/26/2005 16:00 | 25.658 | 33.349 | 27.473 | 37.728 | | 4.226 | 18.899 | 4.241 |
| 9/26/2005 20:00 | 25.681 | 33.353 | 27.493 | 37.742 | | 4.255 | 18.671 | 4.256 |
| 9/27/2005 0:00 | 25.678 | 33.373 | 27.526 | 37.776 | | 4.243 | 18.682 | 4.243 |
| 9/27/2005 4:00 | 25.7 | 33.368 | 27.521 | 37.774 | | 4.251 | 18.572 | 4.229 |
| 9/27/2005 8:00 | 25.688 | 33.383 | 27.55 | 37.793 | | 4.237 | 18.551 | 4.22 |
| 9/27/2005 12:00 | 25.688 | 33.358 | 27.501 | 37.774 | | 4.243 | 18.733 | 4.214 |
| 9/27/2005 16:00 | 25.66 | 33.307 | 27.405 | 37.7 | | 4.249 | 18.847 | 4.25 |
| 9/27/2005 20:00 | 25.648 | 33.294 | 27.387 | 37.619 | | 4.265 | 18.713 | 4.269 |
| 9/28/2005 0:00 | 25.648 | 33.289 | 27.371 | 37.617 | | 4.253 | 18.574 | 4.252 |
| 9/28/2005 4:00 | 25.638 | 33.266 | 27.324 | 37.571 | | 4.261 | 18.541 | 4.238 |
| 9/28/2005 8:00 | 25.663 | 33.302 | 27.381 | 37.559 | | 4.249 | 18.74 | 4.24 |
| 9/28/2005 12:00 | 25.75 | 33.42 | 27.59 | 37.682 | | 4.29 | 18.696 | 4.246 |
| 9/28/2005 16:00 | 25.792 | 33.494 | 27.703 | 37.811 | | 4.255 | 18.713 | 4.257 |
| 9/28/2005 20:00 | 25.852 | 33.56 | 27.803 | 37.89 | | 4.249 | 18.671 | 4.272 |
| 9/29/2005 0:00 | 25.882 | 33.616 | 27.885 | 38.04 | | 4.261 | 18.75 | 4.265 |
| 9/29/2005 4:00 | 25.889 | 33.622 | 27.869 | 38.067 | | 4.273 | 18.646 | 4.255 |
| 9/29/2005 8:00 | 25.916 | 33.667 | 27.934 | 38.114 | | 4.257 | 18.667 | 4.253 |
| 9/29/2005 12:00 | 25.887 | 33.65 | 27.882 | 38.088 | | 4.252 | 18.826 | 4.251 |
| 9/29/2005 16:00 | 25.839 | 33.586 | 27.747 | 38.024 | | 4.277 | 18.864 | 4.264 |
| 9/29/2005 20:00 | 25.832 | 33.569 | 27.701 | 37.94 | | 4.256 | 18.731 | 4.279 |
| 9/30/2005 0:00 | 25.822 | 33.58 | 27.703 | 37.873 | | 4.258 | 18.601 | 4.266 |
| 9/30/2005 4:00 | 25.809 | 33.56 | 27.654 | 37.834 | | 4.275 | 18.576 | 4.253 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 9/30/2005 8:00 | 25.817 | 33.578 | 27.662 | 37.832 | | 4.242 | 18.57 | 4.245 |
| 9/30/2005 12:00 | 25.817 | 33.592 | 27.658 | 37.79 | | 4.258 | 18.779 | 4.266 |
| 9/30/2005 16:00 | 25.797 | 33.571 | 27.602 | 37.776 | | 4.296 | 18.866 | 4.294 |
| 9/30/2005 20:00 | 25.83 | 33.629 | 27.658 | 37.779 | | 4.273 | 18.804 | 4.317 |
| 10/1/2005 0:00 | 25.852 | 33.663 | 27.697 | 37.779 | | 4.279 | 18.69 | 4.303 |
| 10/1/2005 4:00 | 25.877 | 33.708 | 27.753 | 37.848 | | 4.268 | 18.922 | 4.296 |
| 10/1/2005 8:00 | 25.909 | 33.746 | 27.803 | 37.885 | | 4.268 | 18.897 | 4.29 |
| 10/1/2005 12:00 | 25.916 | 33.782 | 27.841 | 37.938 | | 4.262 | 18.992 | 4.288 |
| 10/1/2005 16:00 | 25.906 | 33.78 | 27.815 | 37.908 | | 4.291 | 18.92 | 4.311 |
| 10/1/2005 20:00 | 25.919 | 33.804 | 27.841 | 37.938 | | 4.279 | 18.81 | 4.305 |
| 10/2/2005 0:00 | 25.926 | 33.827 | 27.865 | 37.952 | | 4.276 | 19.05 | 4.29 |
| 10/2/2005 4:00 | 25.879 | 33.836 | 27.865 | 37.924 | | 4.254 | 19.037 | 4.275 |
| 10/2/2005 8:00 | 25.847 | 33.827 | 27.871 | 37.961 | | 4.227 | 18.675 | 4.262 |
| 10/2/2005 12:00 | 25.805 | 33.813 | 27.882 | 37.973 | | 4.231 | 18.642 | 4.262 |
| 10/2/2005 16:00 | 25.78 | 33.782 | 27.869 | 37.945 | | 4.26 | 18.915 | 4.299 |
| 10/2/2005 20:00 | 25.777 | 33.799 | 27.928 | 37.98 | | 4.251 | 18.816 | 4.311 |
| 10/3/2005 0:00 | 25.785 | 33.823 | 27.988 | 38.028 | | 4.284 | 18.74 | 4.303 |
| 10/3/2005 4:00 | 25.775 | 33.84 | 28.024 | 38.104 | | 4.272 | 18.835 | 4.29 |
| 10/3/2005 8:00 | 25.782 | 33.849 | 28.051 | 38.132 | | 4.278 | 18.905 | 4.286 |
| 10/3/2005 12:00 | 25.783 | 33.861 | 28.069 | 38.167 | | 4.293 | 19.025 | 4.29 |
| 10/3/2005 16:00 | 25.767 | 33.849 | 28.04 | 38.155 | | 4.313 | 19.112 | 4.316 |
| 10/3/2005 20:00 | 25.782 | 33.862 | 28.072 | 38.157 | | 4.315 | 18.985 | 4.322 |
| 10/4/2005 0:00 | 25.805 | 33.887 | 28.117 | 38.167 | | 4.286 | 18.865 | 4.312 |
| 10/4/2005 4:00 | 25.807 | 33.9 | 28.129 | 38.19 | | 4.293 | 18.81 | 4.299 |
| 10/4/2005 8:00 | 25.815 | 33.908 | 28.145 | 38.208 | | 4.286 | 18.855 | 4.289 |
| 10/4/2005 12:00 | 25.8 | 33.895 | 28.131 | 38.213 | | 4.29 | 18.994 | 4.301 |
| 10/4/2005 16:00 | 25.772 | 33.866 | 28.08 | 38.173 | | 4.323 | 19.284 | 4.327 |
| 10/4/2005 20:00 | 25.78 | 33.857 | 28.062 | 38.134 | | 4.294 | 19.11 | 4.334 |
| 10/5/2005 0:00 | 25.792 | 33.878 | 28.076 | 38.134 | | 4.311 | 18.969 | 4.321 |
| 10/5/2005 4:00 | 25.802 | 33.891 | 28.088 | 38.171 | | 4.288 | 18.905 | 4.312 |
| 10/5/2005 8:00 | 25.832 | 33.93 | 28.153 | 38.178 | | 4.311 | 19.027 | 4.312 |
| 10/5/2005 12:00 | 25.882 | 34.009 | 28.294 | 38.308 | | 4.284 | 18.917 | 4.306 |
| 10/5/2005 16:00 | 25.901 | 34.051 | 28.364 | 38.388 | | 4.288 | 18.876 | 4.306 |
| 10/5/2005 20:00 | 25.931 | 34.096 | 28.453 | 38.437 | | 4.319 | 18.901 | 4.317 |
| 10/6/2005 0:00 | 25.964 | 34.146 | 28.531 | 38.557 | | 4.309 | 18.938 | 4.315 |
| 10/6/2005 4:00 | 25.983 | 34.173 | 28.581 | 38.626 | | 4.323 | 18.905 | 4.31 |
| 10/6/2005 8:00 | 25.978 | 34.18 | 28.593 | 38.666 | | 4.312 | 18.99 | 4.302 |
| 10/6/2005 12:00 | 25.993 | 34.188 | 28.601 | 38.686 | | 4.314 | 19.124 | 4.3 |
| 10/6/2005 16:00 | 25.973 | 34.16 | 28.545 | 38.629 | | 4.318 | 19.058 | 4.302 |
| 10/6/2005 20:00 | 25.978 | 34.164 | 28.545 | 38.64 | | 4.312 | 18.942 | 4.309 |
| 10/7/2005 0:00 | 25.991 | 34.19 | 28.581 | 38.663 | | 4.3 | 18.929 | 4.3 |
| 10/7/2005 4:00 | 25.988 | 34.199 | 28.587 | 38.645 | | 4.31 | 18.992 | 4.289 |
| 10/7/2005 8:00 | 25.998 | 34.216 | 28.611 | 38.688 | | 4.322 | 18.952 | 4.283 |
| 10/7/2005 12:00 | 25.983 | 34.207 | 28.575 | 38.686 | | 4.298 | 19.097 | 4.272 |
| 10/7/2005 16:00 | 25.951 | 34.16 | 28.487 | 38.587 | | 4.312 | 19.05 | 4.271 |
| 10/7/2005 20:00 | 25.954 | 34.154 | 28.475 | 38.552 | | 4.318 | 18.952 | 4.273 |
| 10/8/2005 0:00 | 25.959 | 34.171 | 28.49 | 38.578 | | 4.325 | 18.865 | 4.262 |
| 10/8/2005 4:00 | 25.961 | 34.188 | 28.495 | 38.545 | | 4.328 | 18.929 | 4.249 |
| 10/8/2005 8:00 | 25.971 | 34.205 | 28.519 | 38.552 | | 4.361 | 18.979 | 4.243 |
| 10/8/2005 12:00 | 25.961 | 34.209 | 28.507 | 38.557 | | 4.343 | 19.004 | 4.23 |
| 10/8/2005 16:00 | 25.936 | 34.162 | 28.416 | 38.531 | | 4.361 | 19.01 | 4.237 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 10/8/2005 20:00 | 25.934 | 34.171 | 28.424 | 38.497 | | 4.345 | 18.89 | 4.245 |
| 10/9/2005 0:00 | 25.919 | 34.186 | 28.436 | 38.495 | | 4.334 | 18.907 | 4.233 |
| 10/9/2005 4:00 | 25.956 | 34.201 | 28.457 | 38.494 | | 4.361 | 18.872 | 4.226 |
| 10/9/2005 8:00 | 25.968 | 34.222 | 28.489 | 38.513 | | 4.349 | 18.853 | 4.216 |
| 10/9/2005 12:00 | 25.978 | 34.233 | 28.497 | 38.525 | | 4.33 | 18.985 | 4.209 |
| 10/9/2005 16:00 | 25.966 | 34.207 | 28.44 | 38.492 | | 4.353 | 19.049 | 4.214 |
| 10/9/2005 20:00 | 26.001 | 34.248 | 28.513 | 38.515 | | 4.343 | 18.967 | 4.231 |
| 10/10/2005 0:00 | 26.033 | 34.282 | 28.571 | 38.568 | | 4.336 | 18.969 | 4.224 |
| 10/10/2005 4:00 | 26.046 | 34.299 | 28.591 | 38.566 | | 4.34 | 18.899 | 4.216 |
| 10/10/2005 8:00 | 26.076 | 34.337 | 28.664 | 38.619 | | 4.338 | 18.961 | 4.211 |
| 10/10/2005 12:00 | 26.085 | 34.357 | 28.692 | 38.666 | | 4.348 | 19.095 | 4.211 |
| 10/10/2005 16:00 | 26.073 | 34.344 | 28.654 | 38.673 | | 4.355 | 19.196 | 4.22 |
| 10/10/2005 20:00 | 26.095 | 34.365 | 28.682 | 38.682 | | 4.373 | 19.134 | 4.231 |
| 10/11/2005 0:00 | 26.11 | 34.388 | 28.714 | 38.742 | | 4.359 | 19.097 | 4.229 |
| 10/11/2005 4:00 | 26.118 | 34.393 | 28.71 | 38.746 | | 4.359 | 19.059 | 4.218 |
| 10/11/2005 8:00 | 26.13 | 34.406 | 28.73 | 38.753 | | 4.381 | 19.035 | 4.214 |
| 10/11/2005 12:00 | 26.123 | 34.412 | 28.732 | 38.742 | | 4.366 | 19.136 | 4.203 |
| 10/11/2005 16:00 | 26.09 | 34.395 | 28.684 | 38.712 | | 4.379 | 19.142 | 4.214 |
| 10/11/2005 20:00 | 26.13 | 34.412 | 28.706 | 38.705 | | 4.385 | 19.084 | 4.227 |
| 10/12/2005 0:00 | 26.076 | 34.427 | 28.75 | 38.728 | | 4.348 | 19.109 | 4.214 |
| 10/12/2005 4:00 | 26.056 | 34.403 | 28.722 | 38.753 | | 4.323 | 18.848 | 4.199 |
| 10/12/2005 8:00 | 25.976 | 34.371 | 28.726 | 38.753 | | 4.311 | 18.592 | 4.186 |
| 10/12/2005 12:00 | 25.914 | 34.35 | 28.752 | 38.762 | | 4.317 | 18.745 | 4.176 |
| 10/12/2005 16:00 | 25.87 | 34.322 | 28.752 | 38.781 | | 4.335 | 18.869 | 4.178 |
| 10/12/2005 20:00 | 25.852 | 34.324 | 28.801 | 38.809 | | 4.348 | 18.797 | 4.182 |
| 10/13/2005 0:00 | 25.82 | 34.318 | 28.813 | 38.873 | | 4.347 | 18.809 | 4.174 |
| 10/13/2005 4:00 | 25.773 | 34.312 | 28.821 | 38.894 | | 4.345 | 18.784 | 4.163 |
| 10/13/2005 8:00 | 25.837 | 34.314 | 28.837 | 38.915 | | 4.354 | 18.778 | 4.157 |
| 10/13/2005 12:00 | 25.832 | 34.314 | 28.847 | 38.938 | | 4.351 | 18.973 | 4.157 |
| 10/13/2005 16:00 | 25.81 | 34.286 | 28.807 | 38.913 | | 4.352 | 18.981 | 4.172 |
| 10/13/2005 20:00 | 25.81 | 34.29 | 28.819 | 38.89 | | 4.37 | 18.867 | 4.185 |
| 10/14/2005 0:00 | 25.817 | 34.307 | 28.849 | 38.938 | | 4.37 | 18.941 | 4.179 |
| 10/14/2005 4:00 | 25.815 | 34.297 | 28.823 | 38.934 | | 4.376 | 18.917 | 4.168 |
| 10/14/2005 8:00 | 25.835 | 34.318 | 28.859 | 38.917 | | 4.376 | 18.915 | 4.164 |
| 10/14/2005 12:00 | 25.854 | 34.335 | 28.895 | 38.982 | | 4.368 | 19.107 | 4.179 |
| 10/14/2005 16:00 | 25.847 | 34.327 | 28.863 | 38.954 | | 4.39 | 19.153 | 4.198 |
| 10/14/2005 20:00 | 25.87 | 34.344 | 28.893 | 38.998 | | 4.386 | 19.033 | 4.215 |
| 10/15/2005 0:00 | 25.896 | 34.382 | 28.949 | 39.005 | | 4.378 | 18.942 | 4.211 |
| 10/15/2005 4:00 | 25.909 | 34.399 | 28.975 | 39.067 | | 4.361 | 19.028 | 4.204 |
| 10/15/2005 8:00 | 25.942 | 34.425 | 29.01 | 39.067 | | 4.361 | 19.01 | 4.198 |
| 10/15/2005 12:00 | 25.939 | 34.431 | 28.992 | 39.13 | | 4.38 | 19.206 | 4.2 |
| 10/15/2005 16:00 | 25.909 | 34.393 | 28.889 | 39.088 | | 4.378 | 19.188 | 4.211 |
| 10/15/2005 20:00 | 25.929 | 34.397 | 28.879 | 39.06 | | 4.374 | 19.039 | 4.217 |
| 10/16/2005 0:00 | 25.942 | 34.414 | 28.893 | 39.065 | | 4.376 | 18.971 | 4.213 |
| 10/16/2005 4:00 | 25.949 | 34.425 | 28.901 | 39.044 | | 4.357 | 18.979 | 4.205 |
| 10/16/2005 8:00 | 25.971 | 34.44 | 28.921 | 39.081 | | 4.373 | 19.115 | 4.2 |
| 10/16/2005 12:00 | 25.976 | 34.45 | 28.925 | 39.095 | | 4.373 | 19.223 | 4.198 |
| 10/16/2005 16:00 | 25.949 | 34.418 | 28.846 | 39.053 | | 4.367 | 19.14 | 4.203 |
| 10/16/2005 20:00 | 25.946 | 34.406 | 28.81 | 39.014 | | 4.388 | 19.101 | 4.201 |
| 10/17/2005 0:00 | 25.939 | 34.403 | 28.79 | 38.991 | | 4.381 | 19.074 | 4.19 |
| 10/17/2005 4:00 | 25.922 | 34.378 | 28.724 | 38.915 | | 4.384 | 19.076 | 4.175 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 10/17/2005 8:00 | 25.946 | 34.395 | 28.746 | 38.927 | | 4.369 | 19.039 | 4.171 |
| 10/17/2005 12:00 | 25.951 | 34.433 | 28.802 | 38.947 | | 4.379 | 19.237 | 4.181 |
| 10/17/2005 16:00 | 25.885 | 34.438 | 28.79 | 38.952 | | 4.381 | 19.324 | |
| 10/17/2005 20:00 | 25.902 | 36.29 | 28.814 | 38.888 | | 4.384 | 19.21 | 4.225 |
| 10/18/2005 0:00 | 25.914 | 36.318 | 28.858 | 38.927 | | 4.383 | 19.206 | 4.218 |
| 10/18/2005 4:00 | 25.949 | 36.33 | 28.862 | 38.918 | | 4.4 | 19.232 | 4.212 |
| 10/18/2005 8:00 | 25.941 | 36.341 | 28.87 | 38.955 | | 4.402 | 19.214 | 4.206 |
| 10/18/2005 12:00 | 25.959 | 36.347 | 28.866 | 38.934 | | 4.398 | 19.383 | 4.21 |
| 10/18/2005 16:00 | 25.944 | 36.315 | 28.777 | 38.881 | | 4.389 | 19.365 | 4.216 |
| 10/18/2005 20:00 | 25.946 | 36.326 | 28.789 | 38.894 | | 4.389 | 19.253 | 4.221 |
| 10/19/2005 0:00 | 25.974 | 36.35 | 28.827 | 38.867 | | 4.387 | 19.234 | 4.216 |
| 10/19/2005 4:00 | 26.018 | 36.418 | 28.946 | 38.931 | | 4.365 | 19.323 | 4.221 |
| 10/19/2005 8:00 | 26.051 | 36.452 | 29.019 | 38.991 | | 4.38 | 19.323 | 4.223 |
| 10/19/2005 12:00 | 26.058 | 36.461 | 29.017 | 39.068 | | 4.38 | 19.443 | 4.21 |
| 10/19/2005 16:00 | 26.041 | 36.435 | 28.988 | 39.063 | | 4.397 | 19.286 | 4.199 |
| 10/19/2005 20:00 | 26.026 | 36.426 | 28.987 | 39.033 | | 4.381 | 19.249 | 4.193 |
| 10/20/2005 0:00 | 25.988 | 36.4 | 28.957 | 39.035 | | 4.306 | 19.222 | 4.174 |
| 10/20/2005 4:00 | 25.466 | 36.264 | 28.884 | 39.003 | | 3.224 | 18.543 | 3.602 |
| 10/20/2005 8:00 | 25.403 | 36.187 | 28.84 | 38.996 | | 3.692 | 18.233 | 3.63 |
| 10/20/2005 12:00 | 25.268 | 36.14 | 28.823 | 39.003 | | 3.933 | 18.19 | 3.649 |
| 10/20/2005 16:00 | 25.108 | 36.072 | 28.749 | 39.052 | | 4.077 | 18.2 | 3.655 |
| 10/20/2005 20:00 | 25.039 | 36.036 | 28.759 | 39.102 | | 4.191 | 18.167 | 3.668 |
| 10/21/2005 0:00 | 24.989 | 35.993 | 28.703 | 39.155 | | 4.249 | 18.229 | 3.67 |
| 10/21/2005 4:00 | 24.927 | 35.946 | 28.612 | 39.179 | | 4.296 | 18.241 | 3.67 |
| 10/21/2005 8:00 | 24.91 | 35.921 | 28.572 | 39.218 | | 4.293 | 18.295 | 3.674 |
| 10/21/2005 12:00 | 24.894 | 35.891 | 28.502 | 39.262 | | 4.294 | 18.479 | 3.675 |
| 10/21/2005 16:00 | 24.863 | 35.825 | 28.363 | 39.259 | | 4.312 | 18.583 | 3.675 |
| 10/21/2005 20:00 | 24.83 | 35.793 | 28.307 | 39.255 | | 4.314 | 18.413 | 3.677 |
| 10/22/2005 0:00 | 24.84 | 35.758 | 28.242 | 39.232 | | 4.322 | 18.314 | 3.673 |
| 10/22/2005 4:00 | 24.832 | 35.718 | 28.162 | 39.213 | | 4.296 | 18.299 | 3.666 |
| 10/22/2005 8:00 | 24.82 | 35.684 | 28.105 | 39.199 | | 4.326 | 18.291 | 3.662 |
| 10/22/2005 12:00 | 24.825 | 35.66 | 28.079 | 39.225 | | 4.316 | 18.401 | 3.656 |
| 10/22/2005 16:00 | 24.76 | 35.596 | 27.957 | 39.144 | | 4.241 | 18.297 | 3.639 |
| 10/22/2005 20:00 | 24.741 | 35.584 | 27.975 | 39.174 | | 4.277 | 18.227 | 3.641 |
| 10/23/2005 0:00 | 24.723 | 35.571 | 27.977 | 39.188 | | 4.262 | 18.169 | 3.639 |
| 10/23/2005 4:00 | 24.731 | 35.569 | 27.999 | 39.22 | | 4.312 | 18.279 | 3.637 |
| 10/23/2005 8:00 | 24.738 | 35.577 | 28.049 | 39.264 | | 4.309 | 18.279 | 3.637 |
| 10/23/2005 12:00 | 24.743 | 35.562 | 28.035 | 39.296 | | 4.334 | 18.477 | 3.624 |
| 10/23/2005 16:00 | 24.758 | 35.552 | 28.037 | 39.276 | | 4.316 | 18.508 | 3.628 |
| 10/23/2005 20:00 | 24.773 | 35.562 | 28.078 | 39.338 | | 4.355 | 18.44 | 3.628 |
| 10/24/2005 0:00 | 24.795 | 35.554 | 28.079 | 39.331 | | 4.309 | 18.372 | 3.624 |
| 10/24/2005 4:00 | 24.798 | 35.537 | 28.069 | 39.363 | | 4.338 | 18.386 | 3.618 |
| 10/24/2005 8:00 | 24.805 | 35.53 | 28.064 | 39.34 | | 4.352 | 18.357 | 3.616 |
| 10/24/2005 12:00 | 24.83 | 35.513 | 28.047 | 39.377 | | 4.338 | 18.605 | 3.609 |
| 10/24/2005 16:00 | 24.81 | 35.47 | 27.967 | 39.333 | | 4.332 | 18.626 | 3.607 |
| 10/24/2005 20:00 | 24.822 | 35.466 | 27.969 | 39.287 | | 4.321 | 18.471 | 3.611 |
| 10/25/2005 0:00 | 24.832 | 35.462 | 27.959 | 39.28 | | 4.346 | 18.409 | 3.603 |
| 10/25/2005 4:00 | 24.84 | 35.449 | 27.947 | 39.299 | | 4.33 | 18.359 | 3.601 |
| 10/25/2005 8:00 | 24.865 | 35.466 | 27.977 | 39.299 | | 4.358 | 18.306 | 3.601 |
| 10/25/2005 12:00 | 24.885 | 35.466 | 27.973 | 39.308 | | 4.344 | 18.555 | 3.599 |
| 10/25/2005 16:00 | 24.86 | 35.406 | 27.866 | 39.227 | | 4.341 | 18.694 | 3.59 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 10/25/2005 20:00 | 24.852 | 35.391 | 27.846 | 39.216 | | 4.338 | 18.526 | 3.59 |
| 10/26/2005 0:00 | 24.865 | 35.381 | 27.828 | 39.19 | | 4.346 | 18.382 | 3.586 |
| 10/26/2005 4:00 | 24.875 | 35.379 | 27.826 | 39.167 | | 4.333 | 18.377 | 3.584 |
| 10/26/2005 8:00 | 24.902 | 35.394 | 27.846 | 39.142 | | 4.323 | 18.363 | 3.584 |
| 10/26/2005 12:00 | 24.919 | 35.396 | 27.854 | 39.16 | | 4.323 | 18.63 | 3.582 |
| 10/26/2005 16:00 | 24.92 | 35.383 | 27.824 | 39.135 | | 4.329 | 18.68 | 3.588 |
| 10/26/2005 20:00 | 24.966 | 35.421 | 27.899 | 39.155 | | 4.348 | 18.506 | 3.603 |
| 10/27/2005 0:00 | 25.009 | 35.466 | 27.969 | 39.202 | | 4.354 | 18.462 | 3.607 |
| 10/27/2005 4:00 | 25.046 | 35.487 | 28.015 | 39.236 | | 4.353 | 18.409 | 3.607 |
| 10/27/2005 8:00 | 25.083 | 35.519 | 28.067 | 39.239 | | 4.374 | 18.444 | 3.609 |
| 10/27/2005 12:00 | 25.118 | 35.547 | 28.108 | 39.308 | | 4.347 | 18.667 | 3.611 |
| 10/27/2005 16:00 | 25.108 | 35.513 | 28.045 | 39.266 | | 4.357 | 18.75 | 3.613 |
| 10/27/2005 20:00 | 25.125 | 35.526 | 28.065 | 39.283 | | 4.366 | 18.622 | 3.622 |
| 10/28/2005 0:00 | 25.153 | 35.549 | 28.097 | 39.273 | | 4.37 | 18.576 | 3.624 |
| 10/28/2005 4:00 | 25.16 | 35.552 | 28.101 | 39.271 | | 4.374 | 18.543 | 3.624 |
| 10/28/2005 8:00 | 25.183 | 35.566 | 28.112 | 39.303 | | 4.384 | 18.547 | 3.624 |
| 10/28/2005 12:00 | 25.187 | 35.566 | 28.103 | 39.303 | | 4.371 | 18.802 | 3.622 |
| 10/28/2005 16:00 | 25.148 | 35.522 | 28.017 | 39.248 | | 4.392 | 18.744 | 3.629 |
| 10/28/2005 20:00 | 25.177 | 35.53 | 28.027 | 39.188 | | 4.398 | 18.638 | 3.637 |
| 10/29/2005 0:00 | 25.197 | 35.547 | 28.047 | 39.218 | | 4.386 | 18.58 | 3.637 |
| 10/29/2005 4:00 | 25.177 | 35.549 | 28.045 | 39.183 | | 4.376 | 18.599 | 3.637 |
| 10/29/2005 8:00 | 25.22 | 35.558 | 28.049 | 39.202 | | 4.392 | 18.644 | 3.637 |
| 10/29/2005 12:00 | 25.237 | 35.562 | 28.045 | 39.165 | | 4.392 | 18.812 | 3.639 |
| 10/29/2005 16:00 | 25.202 | 35.515 | 27.961 | 39.116 | | 4.394 | 18.785 | 3.641 |
| 10/29/2005 20:00 | 25.225 | 35.543 | 28.005 | 39.125 | | 4.4 | 18.657 | 3.652 |
| 10/30/2005 0:00 | 25.244 | 35.562 | 28.029 | 39.142 | | 4.394 | 18.669 | 3.65 |
| 10/30/2005 4:00 | 25.239 | 35.534 | 27.991 | 39.093 | | 4.394 | 18.646 | 3.646 |
| 10/30/2005 8:00 | 25.257 | 35.549 | 28.019 | 39.119 | | 4.421 | 18.64 | 3.65 |
| 10/30/2005 12:00 | 25.294 | 35.577 | 28.053 | 39.125 | | 4.398 | 18.82 | 3.654 |
| 10/30/2005 16:00 | 25.277 | 35.556 | 28.017 | 39.107 | | 4.416 | 18.876 | 3.656 |
| 10/30/2005 20:00 | 25.316 | 35.594 | 28.077 | 39.091 | | 4.398 | 18.694 | 3.663 |
| 10/31/2005 0:00 | 25.342 | 35.622 | 28.114 | 39.141 | | 4.418 | 18.68 | 3.663 |
| 10/31/2005 4:00 | 25.371 | 35.658 | 28.178 | 39.174 | | 4.396 | 18.677 | 3.667 |
| 10/31/2005 8:00 | 25.404 | 35.701 | 28.24 | 39.216 | | 4.402 | 18.731 | 3.671 |
| 10/31/2005 12:00 | 25.441 | 35.722 | 28.27 | 39.246 | | 4.431 | 18.752 | 3.673 |
| 10/31/2005 16:00 | 25.418 | 35.692 | 28.222 | 39.227 | | 4.427 | 18.992 | 3.673 |
| 10/31/2005 20:00 | 25.443 | 35.712 | 28.25 | 39.202 | | 4.431 | 18.781 | 3.682 |
| 11/1/2005 0:00 | 25.466 | 35.733 | 28.276 | 39.248 | | 4.447 | 18.706 | 3.68 |
| 11/1/2005 4:00 | 25.453 | 35.716 | 28.248 | 39.232 | | 4.428 | 18.63 | 3.68 |
| 11/1/2005 8:00 | 25.456 | 35.716 | 28.236 | 39.183 | | 4.432 | 18.601 | 3.678 |
| 11/1/2005 12:00 | 25.473 | 35.722 | 28.232 | 39.197 | | 4.424 | 18.897 | 3.68 |
| 11/1/2005 16:00 | 25.461 | 35.699 | 28.198 | 39.142 | | 4.434 | 19.006 | 3.684 |
| 11/1/2005 20:00 | 25.498 | 35.741 | 28.266 | 39.183 | | 4.424 | 18.843 | 3.695 |
| 11/2/2005 0:00 | 25.493 | 35.758 | 28.276 | 39.199 | | 4.432 | 18.741 | 3.695 |
| 11/2/2005 4:00 | 25.508 | 35.75 | 28.254 | 39.16 | | 4.444 | 18.708 | 3.689 |
| 11/2/2005 8:00 | 25.508 | 35.741 | 28.234 | 39.16 | | 4.424 | 18.671 | 3.689 |
| 11/2/2005 12:00 | 25.505 | 35.737 | 28.208 | 39.112 | | 4.422 | 18.963 | 3.689 |
| 11/2/2005 16:00 | 25.463 | 35.675 | 28.095 | 39.07 | | 4.426 | 18.96 | 3.684 |
| 11/2/2005 20:00 | 25.481 | 35.707 | 28.151 | 39.047 | | 4.43 | 18.762 | 3.697 |
| 11/3/2005 0:00 | 25.495 | 35.72 | 28.152 | 39.04 | | 4.436 | 18.727 | 3.695 |
| 11/3/2005 4:00 | 25.468 | 35.699 | 28.114 | 39.017 | | 4.424 | 18.702 | 3.691 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 11/3/2005 8:00 | 25.478 | 35.697 | 28.104 | 38.955 | | 4.417 | 18.679 | 3.693 |
| 11/3/2005 12:00 | 25.481 | 35.684 | 28.079 | 38.961 | | 4.413 | 18.886 | 3.689 |
| 11/3/2005 16:00 | 25.441 | 35.648 | 28.011 | 38.904 | | 4.426 | 18.874 | 3.687 |
| 11/3/2005 20:00 | 25.486 | 35.701 | 28.095 | 38.906 | | 4.413 | 18.758 | 3.695 |
| 11/4/2005 0:00 | 25.528 | 35.746 | 28.16 | 38.92 | | 4.433 | 18.78 | 3.697 |
| 11/4/2005 4:00 | 25.562 | 35.793 | 28.242 | 38.966 | | 4.427 | 18.764 | 3.704 |
| 11/4/2005 8:00 | 25.587 | 35.818 | 28.284 | 38.991 | | 4.444 | 18.812 | 3.704 |
| 11/4/2005 12:00 | 25.602 | 35.82 | 28.274 | 39.042 | | 4.446 | 19.025 | 3.697 |
| 11/4/2005 16:00 | 25.582 | 35.793 | 28.222 | 38.978 | | 4.434 | 19.002 | 3.7 |
| 11/4/2005 20:00 | 25.597 | 35.816 | 28.27 | 38.975 | | 4.434 | 18.843 | 3.708 |
| 11/5/2005 0:00 | 25.619 | 35.835 | 28.284 | 39.019 | | 4.427 | 18.812 | 3.704 |
| 11/5/2005 4:00 | 25.624 | 35.833 | 28.274 | 39.01 | | 4.425 | 18.783 | 3.702 |
| 11/5/2005 8:00 | 25.632 | 35.848 | 28.312 | 39.019 | | 4.452 | 18.812 | 3.704 |
| 11/5/2005 12:00 | 25.652 | 35.867 | 28.337 | 39.035 | | 4.429 | 18.898 | 3.704 |
| 11/5/2005 16:00 | 25.655 | 35.867 | 28.332 | 39.022 | | 4.431 | 19.076 | 3.708 |
| 11/5/2005 20:00 | 25.694 | 35.925 | 28.425 | 39.038 | | 4.429 | 18.958 | 3.715 |
| 11/6/2005 0:00 | 25.719 | 35.989 | 28.538 | 39.093 | | 4.464 | 18.882 | 3.727 |
| 11/6/2005 4:00 | 25.791 | 36.062 | 28.659 | 39.206 | | 4.452 | 19.023 | 3.732 |
| 11/6/2005 8:00 | 25.83 | 36.104 | 28.733 | 39.245 | | 4.476 | 19.008 | 3.736 |
| 11/6/2005 12:00 | 25.875 | 36.153 | 28.809 | 39.347 | | 4.483 | 19.198 | 3.74 |
| 11/6/2005 16:00 | 25.855 | 36.106 | 28.729 | 39.315 | | 4.464 | 19.217 | 3.736 |
| 11/6/2005 20:00 | 25.858 | 36.113 | 28.747 | 39.336 | | 4.483 | 19.085 | 3.742 |
| 11/7/2005 0:00 | 25.873 | 36.13 | 28.767 | 39.347 | | 4.491 | 19.072 | 3.745 |
| 11/7/2005 4:00 | 25.878 | 36.13 | 28.763 | 39.345 | | 4.47 | 19.058 | 3.745 |
| 11/7/2005 8:00 | 25.883 | 36.13 | 28.763 | 39.34 | | 4.486 | 19.041 | 3.747 |
| 11/7/2005 12:00 | 25.892 | 36.143 | 28.771 | 39.308 | | 4.463 | 19.21 | 3.749 |
| 11/7/2005 16:00 | 25.88 | 36.119 | 28.725 | 39.303 | | 4.488 | 19.235 | 3.749 |
| 11/7/2005 20:00 | 25.905 | 36.166 | 28.793 | 39.319 | | 4.465 | 19.114 | 3.759 |
| 11/8/2005 0:00 | 25.918 | 36.2 | 28.831 | 39.347 | | 4.486 | 19.109 | 3.759 |
| 11/8/2005 4:00 | 25.928 | 36.2 | 28.815 | 39.35 | | 4.501 | 19.109 | 3.755 |
| 11/8/2005 8:00 | 25.915 | 36.181 | 28.777 | 39.294 | | 4.48 | 19.111 | 3.751 |
| 11/8/2005 12:00 | 25.91 | 36.168 | 28.747 | 39.294 | | 4.49 | 19.227 | 3.747 |
| 11/8/2005 16:00 | 25.821 | 36.14 | 28.703 | 39.255 | | 4.481 | 19.171 | 3.749 |
| 11/8/2005 20:00 | 25.913 | 36.175 | 28.753 | 39.218 | | 4.492 | 19.082 | 3.762 |
| 11/9/2005 0:00 | 25.928 | 36.209 | 28.783 | 39.266 | | 4.481 | 19.115 | 3.758 |
| 11/9/2005 4:00 | 26.034 | 36.375 | 29.058 | 39.366 | | 4.498 | 19.221 | 3.781 |
| 11/9/2005 8:00 | 26.081 | 36.424 | 29.141 | 39.458 | | 4.486 | 19.233 | 3.785 |
| 11/9/2005 12:00 | 26.126 | 36.469 | 29.245 | 39.523 | | 4.504 | 19.368 | 3.794 |
| 11/9/2005 16:00 | 26.139 | 36.473 | 29.249 | 39.557 | | 4.506 | 19.405 | 3.796 |
| 11/9/2005 20:00 | 26.171 | 36.505 | 29.32 | 39.611 | | 4.514 | 19.256 | 3.804 |
| 11/10/2005 0:00 | 26.176 | 36.507 | 29.324 | 39.643 | | 4.502 | 19.26 | 3.804 |
| 11/10/2005 4:00 | 26.176 | 36.505 | 29.322 | 39.629 | | 4.508 | 19.293 | 3.809 |
| 11/10/2005 8:00 | 26.178 | 36.501 | 29.304 | 39.664 | | 4.533 | 19.25 | 3.809 |
| 11/10/2005 12:00 | 26.183 | 36.497 | 29.282 | 39.636 | | 4.516 | 19.492 | 3.807 |
| 11/10/2005 16:00 | 26.144 | 36.445 | 29.175 | 39.622 | | 4.526 | 19.521 | 3.802 |
| 11/10/2005 20:00 | 26.126 | 36.439 | 29.151 | 39.583 | | 4.52 | 19.37 | 3.807 |
| 11/11/2005 0:00 | 26.121 | 36.435 | 29.129 | 39.534 | | 4.504 | 19.277 | 3.807 |
| 11/11/2005 4:00 | 26.111 | 36.426 | 29.097 | 39.509 | | 4.491 | 19.26 | 3.805 |
| 11/11/2005 8:00 | 26.104 | 36.432 | 29.095 | 39.518 | | 4.52 | 19.246 | 3.807 |
| 11/11/2005 12:00 | 26.116 | 36.43 | 29.076 | 39.497 | | 4.509 | 19.446 | 3.802 |
| 11/11/2005 16:00 | 26.079 | 36.386 | 28.986 | 39.433 | | 4.505 | 19.382 | 3.798 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 11/11/2005 20:00 | 26.077 | 36.383 | 28.978 | 39.43 | | 4.509 | 19.272 | 3.805 |
| 11/12/2005 0:00 | 26.067 | 36.383 | 28.974 | 39.393 | | 4.487 | 19.225 | 3.802 |
| 11/12/2005 4:00 | 26.052 | 36.36 | 28.925 | 39.349 | | 4.495 | 19.287 | 3.798 |
| 11/12/2005 8:00 | 26.029 | 36.33 | 28.86 | 39.296 | | 4.514 | 19.336 | 3.792 |
| 11/12/2005 12:00 | 26.024 | 36.328 | 28.835 | 39.255 | | 4.495 | 19.32 | 3.788 |
| 11/12/2005 16:00 | 26.017 | 36.302 | 28.801 | 39.204 | | 4.512 | 19.316 | 3.796 |
| 11/12/2005 20:00 | 26.099 | 36.439 | 29.044 | 39.246 | | 4.505 | 19.25 | 3.817 |
| 11/13/2005 0:00 | 26.188 | 36.543 | 29.256 | 39.398 | | 4.514 | 19.347 | 3.83 |
| 11/13/2005 4:00 | 26.248 | 36.62 | 29.444 | 39.453 | | 4.54 | 19.395 | 3.839 |
| 11/13/2005 8:00 | 26.32 | 36.661 | 29.545 | 39.548 | | 4.513 | 19.44 | 3.845 |
| 11/13/2005 12:00 | 26.362 | 36.701 | 29.648 | 39.664 | | 4.53 | 19.546 | 3.854 |
| 11/13/2005 16:00 | 26.377 | 36.705 | 29.668 | 39.717 | | 4.544 | 19.649 | 3.852 |
| 11/13/2005 20:00 | 26.397 | 36.712 | 29.698 | 39.728 | | 4.544 | 19.464 | 3.858 |
| 11/14/2005 0:00 | 26.402 | 36.712 | 29.688 | 39.781 | | 4.552 | 19.4 | 3.858 |
| 11/14/2005 4:00 | 26.366 | 36.703 | 29.673 | 39.79 | | 4.525 | 19.423 | 3.862 |
| 11/14/2005 8:00 | 26.369 | 36.673 | 29.597 | 39.779 | | 4.535 | 19.483 | 3.856 |
| 11/14/2005 12:00 | 26.332 | 36.635 | 29.499 | 39.742 | | 4.527 | 19.587 | 3.852 |
| 11/14/2005 16:00 | 26.287 | 36.575 | 29.376 | 39.654 | | 4.544 | 19.531 | 3.845 |
| 11/14/2005 20:00 | 26.283 | 36.593 | 29.374 | 39.629 | | 4.552 | 19.454 | 3.847 |
| 11/15/2005 0:00 | 26.285 | 36.593 | 29.368 | 39.638 | | 4.535 | 19.438 | 3.848 |
| 11/15/2005 4:00 | 26.27 | 36.58 | 29.336 | 39.585 | | 4.554 | 19.456 | 3.852 |
| 11/15/2005 8:00 | 26.297 | 36.624 | 29.436 | 39.62 | | 4.548 | 19.419 | 3.864 |
| 11/15/2005 12:00 | 26.315 | 36.654 | 29.493 | 39.603 | | 4.523 | 19.413 | 3.869 |
| 11/15/2005 16:00 | 26.34 | 36.684 | 29.595 | 39.668 | | 4.577 | 19.382 | 3.877 |
| 11/15/2005 20:00 | 26.387 | 36.742 | 29.738 | 39.696 | | 4.535 | 19.332 | 3.881 |
| 11/16/2005 0:00 | 26.419 | 36.778 | 29.816 | 39.775 | | 4.56 | 19.413 | 3.89 |
| 11/16/2005 4:00 | 26.434 | 36.816 | 29.869 | 39.82 | | 4.546 | 19.464 | 3.888 |
| 11/16/2005 8:00 | 26.466 | 36.861 | 29.949 | 39.869 | | 4.572 | 19.529 | 3.898 |
| 11/16/2005 12:00 | 26.516 | 37 | 30.074 | 39.922 | | 4.549 | 19.605 | 3.903 |
| 11/16/2005 16:00 | 26.518 | 36.975 | 30.058 | 39.955 | | 4.56 | 19.731 | 3.901 |
| 11/16/2005 20:00 | 26.538 | 36.998 | 30.09 | 39.982 | | 4.566 | 19.564 | 3.907 |
| 11/17/2005 0:00 | 26.541 | 36.994 | 30.08 | 40.001 | | 4.588 | 19.586 | 3.907 |
| 11/17/2005 4:00 | 26.528 | 36.983 | 30.078 | 40.01 | | 4.551 | 19.607 | 3.909 |
| 11/17/2005 8:00 | 26.531 | 36.966 | 30.066 | 40.019 | | 4.568 | 19.596 | 3.909 |
| 11/17/2005 12:00 | 26.528 | 36.955 | 30.046 | 39.996 | | 4.598 | 19.692 | 3.907 |
| 11/17/2005 16:00 | 26.494 | 36.891 | 29.961 | 39.998 | | 4.551 | 19.858 | 3.905 |
| 11/17/2005 20:00 | 26.504 | 36.917 | 29.993 | 39.971 | | 4.557 | 19.769 | 3.913 |
| 11/18/2005 0:00 | 26.514 | 36.94 | 30.016 | 40.008 | | 4.565 | 19.731 | 3.916 |
| 11/18/2005 4:00 | 26.504 | 36.919 | 29.981 | 40.003 | | 4.578 | 19.735 | 3.911 |
| 11/18/2005 8:00 | 26.506 | 36.923 | 29.985 | 39.973 | | 4.567 | 19.719 | 3.913 |
| 11/18/2005 12:00 | 26.499 | 36.908 | 29.957 | 39.996 | | 4.576 | 19.913 | 3.912 |
| 11/18/2005 16:00 | 26.447 | 36.795 | 29.81 | 39.922 | | 4.563 | 19.869 | 3.899 |
| 11/18/2005 20:00 | 26.412 | 36.738 | 29.726 | 39.913 | | 4.551 | 19.756 | 3.892 |
| 11/19/2005 0:00 | 26.375 | 36.714 | 29.681 | 39.88 | | 4.552 | 19.706 | 3.892 |
| 11/19/2005 4:00 | 26.37 | 36.697 | 29.631 | 39.818 | | 4.565 | 19.706 | 3.886 |
| 11/19/2005 8:00 | 26.382 | 36.748 | 29.728 | 39.846 | | 4.565 | 19.642 | 3.899 |
| 11/19/2005 12:00 | 26.434 | 36.817 | 29.822 | 39.869 | | 4.563 | 19.768 | 3.903 |
| 11/19/2005 16:00 | 26.457 | 36.864 | 29.877 | 39.892 | | 4.589 | 19.793 | 3.909 |
| 11/19/2005 20:00 | 26.501 | 36.951 | 29.991 | 39.927 | | 4.554 | 19.685 | 3.918 |
| 11/20/2005 0:00 | 26.526 | 37.007 | 30.044 | 39.924 | | 4.581 | 19.642 | 3.92 |
| 11/20/2005 4:00 | 26.553 | 37.041 | 30.092 | 39.945 | | 4.561 | 19.594 | 3.924 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 11/20/2005 8:00 | 26.563 | 37.051 | 30.11 | 39.966 | | 4.589 | 19.611 | 3.926 |
| 11/20/2005 12:00 | 26.563 | 37.064 | 30.118 | 40.01 | | 4.592 | 19.652 | 3.926 |
| 11/20/2005 16:00 | 26.556 | 37.034 | 30.07 | 40.01 | | 4.585 | 19.731 | 3.924 |
| 11/20/2005 20:00 | 26.563 | 37.055 | 30.098 | 40.017 | | 4.566 | 19.71 | 3.933 |
| 11/21/2005 0:00 | 26.558 | 37.036 | 30.061 | 40.008 | | 4.562 | 19.638 | 3.927 |
| 11/21/2005 4:00 | 26.546 | 37.015 | 30.026 | 39.998 | | 4.585 | 19.64 | 3.924 |
| 11/21/2005 8:00 | 26.536 | 37.019 | 30.046 | 39.962 | | 4.583 | 19.636 | 3.933 |
| 11/21/2005 12:00 | 26.546 | 37.039 | 30.07 | 39.994 | | 4.597 | 19.795 | 3.933 |
| 11/21/2005 16:00 | 26.563 | 37.1 | 30.09 | 40.001 | | 4.591 | 20.006 | 3.935 |
| 11/21/2005 20:00 | 26.591 | 37.152 | 30.138 | 40.017 | | 4.603 | 19.853 | 3.937 |
| 11/22/2005 0:00 | 26.601 | 37.182 | 30.168 | 40.005 | | 4.589 | 19.76 | 3.939 |
| 11/22/2005 4:00 | 26.61 | 37.199 | 30.184 | 40.038 | | 4.611 | 19.737 | 3.941 |
| 11/22/2005 8:00 | 26.61 | 37.203 | 30.184 | 40.047 | | 4.613 | 19.739 | 3.941 |
| 11/22/2005 12:00 | 26.61 | 37.214 | 30.184 | 40.047 | | 4.603 | 19.865 | 3.941 |
| 11/22/2005 16:00 | 26.568 | 37.124 | 30.062 | 39.978 | | 4.591 | 20.097 | 3.933 |
| 11/22/2005 20:00 | 26.521 | 37.107 | 30.029 | 39.987 | | 4.591 | 19.899 | 3.931 |
| 11/23/2005 0:00 | 26.521 | 37.043 | 29.941 | 39.927 | | 4.568 | 19.917 | 3.925 |
| 11/23/2005 4:00 | 26.489 | 36.998 | 29.875 | 39.922 | | 4.603 | 19.894 | 3.92 |
| 11/23/2005 8:00 | 26.494 | 37.002 | 29.891 | 39.904 | | 4.58 | 19.869 | 3.925 |
| 11/23/2005 12:00 | 26.499 | 37.043 | 29.933 | 39.876 | | 4.569 | 19.903 | 3.925 |
| 11/23/2005 16:00 | 26.524 | 37.077 | 29.965 | 39.878 | | 4.588 | 19.901 | 3.929 |
| 11/23/2005 20:00 | 26.551 | 37.145 | 30.04 | 39.897 | | 4.588 | 19.745 | 3.937 |
| 11/24/2005 0:00 | 26.586 | 37.207 | 30.114 | 39.924 | | 4.602 | 19.722 | 3.943 |
| 11/24/2005 4:00 | 26.628 | 37.282 | 30.207 | 39.984 | | 4.594 | 19.735 | 3.95 |
| 11/24/2005 8:00 | 26.677 | 37.38 | 30.335 | 40.024 | | 4.6 | 19.747 | 3.96 |
| 11/24/2005 12:00 | 26.74 | 37.497 | 30.498 | 40.084 | | 4.613 | 19.813 | 3.967 |
| 11/24/2005 16:00 | 26.737 | 37.491 | 30.48 | 40.111 | | 4.603 | 19.939 | 3.965 |
| 11/24/2005 20:00 | 26.772 | 37.544 | 30.556 | 40.109 | | 4.611 | 19.726 | 3.976 |
| 11/25/2005 0:00 | 26.772 | 37.547 | 30.542 | 40.137 | | 4.607 | 19.801 | 3.971 |
| 11/25/2005 4:00 | 26.767 | 37.525 | 30.51 | 40.178 | | 4.631 | 19.768 | 3.971 |
| 11/25/2005 8:00 | 26.754 | 37.5 | 30.47 | 40.172 | | 4.612 | 19.728 | 3.971 |
| 11/25/2005 12:00 | 26.732 | 37.465 | 30.413 | 40.155 | | 4.608 | 19.898 | 3.967 |
| 11/25/2005 16:00 | 26.68 | 37.35 | 30.259 | 40.111 | | 4.621 | 20.064 | 3.954 |
| 11/25/2005 20:00 | 26.673 | 37.342 | 30.252 | 40.093 | | 4.598 | 19.931 | 3.956 |
| 11/26/2005 0:00 | 26.658 | 37.372 | 30.285 | 40.084 | | 4.612 | 19.863 | 3.963 |
| 11/26/2005 4:00 | 26.682 | 37.389 | 30.297 | 40.056 | | 4.583 | 19.838 | 3.959 |
| 11/26/2005 8:00 | 26.675 | 37.389 | 30.285 | 40.049 | | 4.571 | 19.819 | 3.961 |
| 11/26/2005 12:00 | 26.675 | 37.378 | 30.259 | 40.07 | | 4.581 | 19.999 | 3.956 |
| 11/26/2005 16:00 | 26.641 | 37.303 | 30.156 | 40.01 | | 4.583 | 19.993 | 3.948 |
| 11/26/2005 20:00 | 26.636 | 37.303 | 30.154 | 40.026 | | 4.602 | 19.954 | 3.95 |
| 11/27/2005 0:00 | 26.641 | 37.316 | 30.164 | 40.021 | | 4.597 | 19.944 | 3.95 |
| 11/27/2005 4:00 | 26.616 | 37.28 | 30.112 | 39.998 | | 4.589 | 20.016 | 3.946 |
| 11/27/2005 8:00 | 26.611 | 37.261 | 30.092 | 39.961 | | 4.589 | 20.014 | 3.946 |
| 11/27/2005 12:00 | 26.608 | 37.246 | 30.063 | 39.943 | | 4.6 | 20.012 | 3.937 |
| 11/27/2005 16:00 | 26.564 | 37.171 | 29.969 | 39.938 | | 4.595 | 19.973 | 3.933 |
| 11/27/2005 20:00 | 26.559 | 37.162 | 29.961 | 39.885 | | 4.566 | 19.871 | 3.931 |
| 11/28/2005 0:00 | 26.531 | 37.141 | 29.931 | 39.892 | | 4.575 | 19.824 | 3.927 |
| 11/28/2005 4:00 | 26.522 | 37.126 | 29.933 | 39.869 | | 4.595 | 19.791 | 3.927 |
| 11/28/2005 8:00 | 26.534 | 37.162 | 30.025 | 39.876 | | 4.569 | 19.671 | 3.935 |
| 11/28/2005 12:00 | 26.551 | 37.228 | 30.14 | 39.913 | | 4.593 | 19.604 | 3.944 |
| 11/28/2005 16:00 | 26.571 | 37.278 | 30.252 | 39.947 | | 4.593 | 19.616 | 3.952 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 11/28/2005 20:00 | 26.626 | 37.378 | 30.407 | 39.996 | | 4.607 | 19.668 | 3.961 |
| 11/29/2005 0:00 | 26.656 | 37.436 | 30.514 | 40.042 | | 4.616 | 19.733 | 3.969 |
| 11/29/2005 4:00 | 26.7 | 37.508 | 30.647 | 40.07 | | 4.63 | 19.842 | 3.98 |
| 11/29/2005 8:00 | 26.742 | 37.585 | 30.753 | 40.151 | | 4.655 | 19.867 | 3.982 |
| 11/29/2005 12:00 | 26.787 | 37.66 | 30.854 | 40.215 | | 4.628 | 19.939 | 3.988 |
| 11/29/2005 16:00 | 26.802 | 37.677 | 30.904 | 40.229 | | 4.634 | 19.995 | 3.995 |
| 11/29/2005 20:00 | 26.834 | 37.728 | 30.976 | 40.312 | | 4.632 | 19.978 | 3.997 |
| 11/30/2005 0:00 | 26.837 | 37.737 | 30.99 | 40.354 | | 4.644 | 19.939 | 3.995 |
| 11/30/2005 4:00 | 26.832 | 37.722 | 30.988 | 40.347 | | 4.646 | 19.918 | 3.995 |
| 11/30/2005 8:00 | 26.827 | 37.707 | 30.974 | 40.393 | | 4.634 | 19.887 | 3.997 |
| 11/30/2005 12:00 | 26.809 | 37.66 | 30.9 | 40.386 | | 4.644 | 19.989 | 3.988 |
| 11/30/2005 16:00 | 26.773 | 37.583 | 30.829 | 40.326 | | 4.669 | 20.109 | 3.988 |
| 11/30/2005 20:00 | 26.782 | 37.613 | 30.861 | 40.363 | | 4.634 | 20.084 | 3.997 |
| 12/1/2005 0:00 | 26.792 | 37.64 | 30.888 | 40.379 | | 4.646 | 20.071 | 3.999 |
| 12/1/2005 4:00 | 26.857 | 37.754 | 31.048 | 40.398 | | 4.638 | 19.933 | 4.012 |
| 12/1/2005 8:00 | 26.907 | 37.833 | 31.151 | 40.449 | | 4.665 | 19.92 | 4.014 |
| 12/1/2005 12:00 | 26.936 | 37.892 | 31.234 | 40.495 | | 4.665 | 20.024 | 4.018 |
| 12/1/2005 16:00 | 26.934 | 37.85 | 31.189 | 40.541 | | 4.646 | 20.136 | 4.014 |
| 12/1/2005 20:00 | 26.924 | 37.833 | 31.161 | 40.511 | | 4.656 | 20.113 | 4.012 |
| 12/2/2005 0:00 | 26.931 | 37.843 | 31.171 | 40.523 | | 4.654 | 20.098 | 4.018 |
| 12/2/2005 4:00 | 26.921 | 37.835 | 31.163 | 40.55 | | 4.678 | 20.102 | 4.016 |
| 12/2/2005 8:00 | 26.907 | 37.811 | 31.125 | 40.548 | | 4.654 | 20.131 | 4.014 |
| 12/2/2005 12:00 | 26.882 | 37.756 | 31.034 | 40.523 | | 4.648 | 20.243 | 4.003 |
| 12/2/2005 16:00 | 26.825 | 37.651 | 30.898 | 40.439 | | 4.645 | 20.305 | 3.995 |
| 12/2/2005 20:00 | 26.827 | 37.662 | 30.92 | 40.46 | | 4.656 | 20.222 | 4.001 |
| 12/3/2005 0:00 | 26.822 | 37.662 | 30.902 | 40.421 | | 4.631 | 20.206 | 3.999 |
| 12/3/2005 4:00 | 26.82 | 37.662 | 30.89 | 40.446 | | 4.657 | 20.189 | 3.995 |
| 12/3/2005 8:00 | 26.818 | 37.666 | 30.912 | 40.421 | | 4.681 | 20.176 | 4.003 |
| 12/3/2005 12:00 | 26.837 | 37.707 | 30.948 | 40.458 | | 4.672 | 20.199 | 4.003 |
| 12/3/2005 16:00 | 26.842 | 37.713 | 30.962 | 40.463 | | 4.639 | 20.239 | 4.007 |
| 12/3/2005 20:00 | 26.89 | 37.818 | 31.093 | 40.509 | | 4.661 | 20.125 | 4.02 |
| 12/4/2005 0:00 | 26.939 | 37.899 | 31.193 | 40.555 | | 4.641 | 20.063 | 4.024 |
| 12/4/2005 4:00 | 26.956 | 37.933 | 31.247 | 40.583 | | 4.645 | 20.052 | 4.031 |
| 12/4/2005 8:00 | 26.972 | 37.976 | 31.318 | 40.592 | | 4.662 | 20.023 | 4.035 |
| 12/4/2005 12:00 | 27.026 | 38.04 | 31.394 | 40.67 | | 4.69 | 20.104 | 4.037 |
| 12/4/2005 16:00 | 27.026 | 38.027 | 31.384 | 40.68 | | 4.674 | 20.174 | 4.039 |
| 12/4/2005 20:00 | 27.051 | 38.067 | 31.436 | 40.712 | | 4.67 | 20.079 | 4.044 |
| 12/5/2005 0:00 | 27.068 | 38.095 | 31.473 | 40.737 | | 4.67 | 20.135 | 4.048 |
| 12/5/2005 4:00 | 27.066 | 38.084 | 31.453 | 40.744 | | 4.676 | 20.156 | 4.044 |
| 12/5/2005 8:00 | 27.051 | 38.052 | 31.424 | 40.735 | | 4.663 | 20.162 | 4.044 |
| 12/5/2005 12:00 | 27.026 | 38.02 | 31.366 | 40.714 | | 4.665 | 20.297 | 4.037 |
| 12/5/2005 16:00 | 26.974 | 37.905 | 31.213 | 40.657 | | 4.677 | 20.416 | 4.027 |
| 12/5/2005 20:00 | 26.937 | 37.843 | 31.145 | 40.583 | | 4.659 | 20.334 | 4.029 |
| 12/6/2005 0:00 | 26.986 | 37.948 | 31.282 | 40.65 | | 4.671 | 20.234 | 4.046 |
| 12/6/2005 4:00 | 27.036 | 38.042 | 31.374 | 40.696 | | 4.671 | 20.181 | 4.048 |
| 12/6/2005 8:00 | 27.086 | 38.127 | 31.495 | 40.717 | | 4.677 | 20.176 | 4.06 |
| 12/6/2005 12:00 | 27.13 | 38.2 | 31.587 | 40.765 | | 4.692 | 20.193 | 4.062 |
| 12/6/2005 16:00 | 27.14 | 38.195 | 31.583 | 40.818 | | 4.682 | 20.265 | 4.06 |
| 12/6/2005 20:00 | 27.14 | 38.24 | 31.648 | 40.848 | | 4.691 | 20.181 | 4.069 |
| 12/7/2005 0:00 | 27.195 | 38.287 | 31.706 | 40.851 | | 4.679 | 20.234 | 4.071 |
| 12/7/2005 4:00 | 27.204 | 38.311 | 31.742 | 40.874 | | 4.687 | 20.248 | 4.075 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 12/7/2005 8:00 | 27.194 | 38.326 | 31.766 | 40.895 | | 4.706 | 20.228 | 4.075 |
| 12/7/2005 12:00 | 27.237 | 38.347 | 31.798 | 40.943 | | 4.694 | 20.308 | 4.079 |
| 12/7/2005 16:00 | 27.217 | 38.302 | 31.748 | 40.931 | | 4.712 | 20.41 | 4.073 |
| 12/7/2005 20:00 | 27.212 | 38.306 | 31.764 | 40.934 | | 4.706 | 20.43 | 4.077 |
| 12/8/2005 0:00 | 27.204 | 38.289 | 31.738 | 40.929 | | 4.679 | 20.488 | 4.073 |
| 12/8/2005 4:00 | 27.195 | 38.262 | 31.71 | 40.911 | | 4.696 | 20.54 | 4.077 |
| 12/8/2005 8:00 | 27.182 | 38.244 | 31.69 | 40.899 | | 4.669 | 20.561 | 4.077 |
| 12/8/2005 12:00 | 27.18 | 38.24 | 31.68 | 40.897 | | 4.714 | 20.588 | 4.077 |
| 12/8/2005 16:00 | 27.158 | 38.204 | 31.637 | 40.844 | | 4.693 | 20.65 | 4.075 |
| 12/8/2005 20:00 | 27.177 | 38.23 | 31.67 | 40.865 | | 4.689 | 20.635 | 4.079 |
| 12/9/2005 0:00 | 27.19 | 38.257 | 31.706 | 40.906 | | 4.703 | 20.613 | 4.084 |
| 12/9/2005 4:00 | 27.205 | 38.268 | 31.718 | 40.922 | | 4.71 | 20.617 | 4.082 |
| 12/9/2005 8:00 | 27.197 | 38.259 | 31.71 | 40.927 | | 4.689 | 20.637 | 4.082 |
| 12/9/2005 12:00 | 27.204 | 38.251 | 31.706 | 40.929 | | 4.691 | 20.658 | 4.079 |
| 12/9/2005 16:00 | 27.168 | 38.176 | 31.611 | 40.855 | | 4.685 | 20.656 | 4.073 |
| 12/9/2005 20:00 | 27.143 | 38.14 | 31.565 | 40.858 | | 4.672 | 20.652 | 4.071 |
| 12/10/2005 0:00 | 27.13 | 38.099 | 31.505 | 40.832 | | 4.691 | 20.642 | 4.065 |
| 12/10/2005 4:00 | 27.083 | 38.029 | 31.416 | 40.791 | | 4.678 | 20.646 | 4.056 |
| 12/10/2005 8:00 | 27.068 | 38.008 | 31.384 | 40.737 | | 4.674 | 20.573 | 4.06 |
| 12/10/2005 12:00 | 27.076 | 38.042 | 31.416 | 40.731 | | 4.68 | 20.577 | 4.062 |
| 12/10/2005 16:00 | 27.098 | 38.074 | 31.452 | 40.77 | | 4.684 | 20.571 | 4.067 |
| 12/10/2005 20:00 | 27.14 | 38.151 | 31.549 | 40.788 | | 4.688 | 20.503 | 4.073 |
| 12/11/2005 0:00 | 27.135 | 38.172 | 31.587 | 40.839 | | 4.662 | 20.474 | 4.075 |
| 12/11/2005 4:00 | 27.153 | 38.161 | 31.593 | 40.851 | | 4.69 | 20.482 | 4.077 |
| 12/11/2005 8:00 | 27.153 | 38.148 | 31.591 | 40.851 | | 4.674 | 20.48 | 4.077 |
| 12/11/2005 12:00 | 27.11 | 38.119 | 31.551 | 40.814 | | 4.73 | 20.544 | 4.071 |
| 12/11/2005 16:00 | 27.101 | 38.05 | 31.486 | 40.807 | | 4.709 | 20.497 | 4.071 |
| 12/11/2005 20:00 | 27.108 | 38.089 | 31.531 | 40.816 | | 4.697 | 20.395 | 4.075 |
| 12/12/2005 0:00 | 27.12 | 38.114 | 31.567 | 40.814 | | 4.669 | 20.352 | 4.073 |
| 12/12/2005 4:00 | 27.12 | 38.127 | 31.601 | 40.86 | | 4.67 | 20.339 | 4.079 |
| 12/12/2005 8:00 | 27.14 | 38.189 | 31.692 | 40.862 | | 4.684 | 20.304 | 4.088 |
| 12/12/2005 12:00 | 27.202 | 38.249 | 31.762 | 40.934 | | 4.688 | 20.447 | 4.09 |
| 12/12/2005 16:00 | 27.2 | 38.236 | 31.762 | 40.952 | | 4.715 | 20.602 | 4.088 |
| 12/12/2005 20:00 | 27.21 | 38.259 | 31.802 | 40.943 | | 4.713 | 20.438 | 4.092 |
| 12/13/2005 0:00 | 27.175 | 38.251 | 31.794 | 40.985 | | 4.707 | 20.374 | 4.09 |
| 12/13/2005 4:00 | 27.19 | 38.227 | 31.778 | 40.982 | | 4.702 | 20.399 | 4.088 |
| 12/13/2005 8:00 | 27.162 | 38.189 | 31.74 | 40.938 | | 4.723 | 20.44 | 4.088 |
| 12/13/2005 12:00 | 27.13 | 38.148 | 31.683 | 40.941 | | 4.715 | 20.521 | 4.079 |
| 12/13/2005 16:00 | 27.103 | 38.061 | 31.591 | 40.871 | | 4.702 | 20.573 | 4.071 |
| 12/13/2005 20:00 | 27.086 | 38.046 | 31.557 | 40.851 | | 4.725 | 20.579 | 4.071 |
| 12/14/2005 0:00 | 27.058 | 38.01 | 31.511 | 40.855 | | 4.71 | 20.583 | 4.066 |
| 12/14/2005 4:00 | 27.059 | 38.018 | 31.537 | 40.825 | | 4.698 | 20.54 | 4.068 |
| 12/14/2005 8:00 | 27.079 | 38.101 | 31.655 | 40.892 | | 4.725 | 20.442 | 4.079 |
| 12/14/2005 12:00 | 27.138 | 38.163 | 31.724 | 40.943 | | 4.737 | 20.49 | 4.081 |
| 12/14/2005 16:00 | 27.126 | 38.166 | 31.746 | 40.955 | | 4.723 | 20.54 | 4.081 |
| 12/14/2005 20:00 | 27.15 | 38.178 | 31.77 | 40.975 | | 4.723 | 20.48 | 4.083 |
| 12/15/2005 0:00 | 27.16 | 38.189 | 31.79 | 40.985 | | 4.727 | 20.424 | 4.085 |
| 12/15/2005 4:00 | 27.156 | 38.174 | 31.78 | 40.959 | | 4.694 | 20.418 | 4.083 |
| 12/15/2005 8:00 | 27.143 | 38.153 | 31.77 | 40.985 | | 4.724 | 20.426 | 4.083 |
| 12/15/2005 12:00 | 27.158 | 38.166 | 31.796 | 40.968 | | 4.683 | 20.442 | 4.088 |
| 12/15/2005 16:00 | 27.168 | 38.17 | 31.816 | 41.003 | | 4.71 | 20.49 | 4.09 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 12/15/2005 20:00 | 27.18 | 38.21 | 31.854 | 41.024 | | 4.728 | 20.451 | 4.09 |
| 12/16/2005 0:00 | 27.193 | 38.225 | 31.876 | 41.008 | | 4.716 | 20.444 | 4.094 |
| 12/16/2005 4:00 | 27.2 | 38.244 | 31.909 | 41.056 | | 4.739 | 20.448 | 4.096 |
| 12/16/2005 8:00 | 27.21 | 38.259 | 31.939 | 41.047 | | 4.734 | 20.428 | 4.098 |
| 12/16/2005 12:00 | 27.26 | 38.332 | 32.017 | 41.114 | | 4.747 | 20.471 | 4.104 |
| 12/16/2005 16:00 | 27.272 | 38.334 | 32.038 | 41.135 | | 4.745 | 20.519 | 4.104 |
| 12/16/2005 20:00 | 27.302 | 38.379 | 32.104 | 41.142 | | 4.732 | 20.488 | 4.113 |
| 12/17/2005 0:00 | 27.342 | 38.46 | 32.178 | 41.186 | | 4.716 | 20.465 | 4.119 |
| 12/17/2005 4:00 | 27.367 | 38.503 | 32.236 | 41.229 | | 4.751 | 20.467 | 4.119 |
| 12/17/2005 8:00 | 27.391 | 38.533 | 32.289 | 41.264 | | 4.751 | 20.457 | 4.123 |
| 12/17/2005 12:00 | 27.418 | 38.575 | 32.335 | 41.329 | | 4.765 | 20.585 | 4.126 |
| 12/17/2005 16:00 | 27.413 | 38.55 | 32.343 | 41.308 | | 4.753 | 20.62 | 4.126 |
| 12/17/2005 20:00 | 27.436 | 38.582 | 32.379 | 41.336 | | 4.786 | 20.585 | 4.127 |
| 12/18/2005 0:00 | 27.46 | 38.622 | 32.429 | 41.398 | | 4.79 | 20.624 | 4.136 |
| 12/18/2005 4:00 | 27.475 | 38.644 | 32.447 | 41.424 | | 4.759 | 20.616 | 4.134 |
| 12/18/2005 8:00 | 27.493 | 38.674 | 32.488 | 41.447 | | 4.767 | 20.672 | 4.136 |
| 12/18/2005 12:00 | 27.52 | 38.699 | 32.518 | 41.474 | | 4.757 | 20.699 | 4.14 |
| 12/18/2005 16:00 | 27.51 | 38.654 | 32.508 | 41.47 | | 4.757 | 20.744 | 4.14 |
| 12/18/2005 20:00 | 27.508 | 38.648 | 32.514 | 41.474 | | 4.775 | 20.746 | 4.14 |
| 12/19/2005 0:00 | 27.51 | 38.644 | 32.514 | 41.477 | | 4.767 | 20.755 | 4.14 |
| 12/19/2005 4:00 | 27.503 | 38.654 | 32.52 | 41.481 | | 4.789 | 20.746 | 4.142 |
| 12/19/2005 8:00 | 27.505 | 38.637 | 32.508 | 41.454 | | 4.767 | 20.761 | 4.142 |
| 12/19/2005 12:00 | 27.508 | 38.637 | 32.512 | 41.458 | | 4.777 | 20.773 | 4.14 |
| 12/19/2005 16:00 | 27.47 | 38.563 | 32.443 | 41.444 | | 4.779 | 20.887 | 4.134 |
| 12/19/2005 20:00 | 27.455 | 38.545 | 32.421 | 41.43 | | 4.766 | 20.895 | 4.136 |
| 12/20/2005 0:00 | 27.448 | 38.513 | 32.393 | 41.412 | | 4.779 | 20.936 | 4.134 |
| 12/20/2005 4:00 | 27.441 | 38.511 | 32.383 | 41.396 | | 4.75 | 20.93 | 4.134 |
| 12/20/2005 8:00 | 27.438 | 38.507 | 32.381 | 41.373 | | 4.764 | 20.944 | 4.134 |
| 12/20/2005 12:00 | 27.448 | 38.516 | 32.383 | 41.403 | | 4.76 | 20.951 | 4.136 |
| 12/20/2005 16:00 | 27.438 | 38.494 | 32.359 | 41.393 | | 4.742 | 20.953 | 4.134 |
| 12/20/2005 20:00 | 27.426 | 38.501 | 32.363 | 41.363 | | 4.787 | 20.948 | 4.134 |
| 12/21/2005 0:00 | 27.446 | 38.501 | 32.363 | 41.396 | | 4.762 | 20.948 | 4.136 |
| 12/21/2005 4:00 | 27.441 | 38.49 | 32.349 | 41.396 | | 4.756 | 20.963 | 4.131 |
| 12/21/2005 8:00 | 27.436 | 38.481 | 32.347 | 41.359 | | 4.768 | 20.973 | 4.133 |
| 12/21/2005 12:00 | 27.453 | 38.513 | 32.371 | 41.403 | | 4.772 | 20.965 | 4.138 |
| 12/21/2005 16:00 | 27.446 | 38.486 | 32.347 | 41.363 | | 4.776 | 21.021 | 4.133 |
| 12/21/2005 20:00 | 27.448 | 38.486 | 32.349 | 41.398 | | 4.762 | 20.99 | 4.138 |
| 12/22/2005 0:00 | 27.441 | 38.466 | 32.331 | 41.393 | | 4.756 | 20.988 | 4.133 |
| 12/22/2005 4:00 | 27.419 | 38.434 | 32.299 | 41.345 | | 4.749 | 20.992 | 4.131 |
| 12/22/2005 8:00 | 27.396 | 38.385 | 32.25 | 41.343 | | 4.752 | 20.959 | 4.125 |
| 12/22/2005 12:00 | 27.394 | 38.383 | 32.234 | 41.336 | | 4.747 | 20.99 | 4.125 |
| 12/22/2005 16:00 | 27.367 | 38.321 | 32.18 | 41.308 | | 4.772 | 20.841 | 4.12 |
| 12/22/2005 20:00 | 27.359 | 38.309 | 32.156 | 41.262 | | 4.754 | 20.767 | 4.118 |
| 12/23/2005 0:00 | 27.354 | 38.304 | 32.148 | 41.257 | | 4.731 | 20.791 | 4.116 |
| 12/23/2005 4:00 | 27.349 | 38.296 | 32.138 | 41.273 | | 4.764 | 20.808 | 4.116 |
| 12/23/2005 8:00 | 27.359 | 38.319 | 32.17 | 41.287 | | 4.735 | 20.754 | 4.12 |
| 12/23/2005 12:00 | 27.374 | 38.349 | 32.194 | 41.271 | | 4.747 | 20.806 | 4.122 |
| 12/23/2005 16:00 | 27.352 | 38.3 | 32.154 | 41.253 | | 4.747 | 20.963 | 4.118 |
| 12/23/2005 20:00 | 27.367 | 38.311 | 32.168 | 41.262 | | 4.749 | 20.884 | 4.118 |
| 12/24/2005 0:00 | 27.374 | 38.323 | 32.182 | 41.294 | | 4.743 | 20.857 | 4.122 |
| 12/24/2005 4:00 | 27.382 | 38.341 | 32.202 | 41.306 | | 4.752 | 20.862 | 4.122 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|------------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 12/24/2005 8:00 | 27.387 | 38.366 | 32.24 | 41.324 | | 4.735 | 20.709 | 4.122 |
| 12/24/2005 12:00 | 27.384 | 38.415 | 32.303 | 41.37 | | 4.698 | 20.541 | 4.116 |
| 12/24/2005 16:00 | 27.347 | 38.394 | 32.314 | 41.368 | | 4.691 | 20.524 | 4.097 |
| 12/24/2005 20:00 | 27.359 | 38.4 | 32.351 | 41.393 | | 4.716 | 20.493 | 4.079 |
| 12/25/2005 0:00 | 27.34 | 38.381 | 32.365 | 41.437 | | 4.726 | 20.498 | 4.064 |
| 12/25/2005 4:00 | 27.33 | 38.358 | 32.377 | 41.444 | | 4.741 | 20.518 | 4.058 |
| 12/25/2005 8:00 | 27.32 | 38.345 | 32.389 | 41.463 | | 4.722 | 20.507 | 4.051 |
| 12/25/2005 12:00 | 27.32 | 38.345 | 32.407 | 41.477 | | 4.741 | 20.538 | 4.043 |
| 12/25/2005 16:00 | 27.305 | 38.311 | 32.401 | 41.474 | | 4.766 | 20.613 | 4.039 |
| 12/25/2005 20:00 | 27.313 | 38.311 | 32.419 | 41.46 | | 4.753 | 20.592 | 4.037 |
| 12/26/2005 0:00 | 27.298 | 38.3 | 32.421 | 41.465 | | 4.743 | 20.578 | 4.032 |
| 12/26/2005 4:00 | 27.288 | 38.277 | 32.409 | 41.497 | | 4.771 | 20.582 | 4.026 |
| 12/26/2005 8:00 | 27.276 | 38.236 | 32.383 | 41.451 | | 4.761 | 20.599 | 4.024 |
| 12/26/2005 12:00 | 27.266 | 38.232 | 32.377 | 41.481 | | 4.747 | 20.673 | 4.02 |
| 12/26/2005 16:00 | 27.234 | 38.153 | 32.319 | 41.444 | | 4.771 | 20.896 | 4.016 |
| 12/26/2005 20:00 | 27.229 | 38.151 | 32.308 | 41.435 | | 4.736 | 20.758 | 4.016 |
| 12/27/2005 0:00 | 27.219 | 38.138 | 32.3 | 41.43 | | 4.73 | 20.721 | 4.013 |
| 12/27/2005 4:00 | 27.209 | 38.116 | 32.272 | 41.417 | | 4.753 | 20.675 | 4.007 |
| 12/27/2005 8:00 | 27.184 | 38.084 | 32.232 | 41.398 | | 4.749 | 20.681 | 4.005 |
| 12/27/2005 12:00 | 27.179 | 38.078 | 32.22 | 41.393 | | 4.742 | 20.76 | 4.001 |
| 12/27/2005 16:00 | 27.167 | 38.046 | 32.202 | 41.35 | | 4.734 | 20.783 | 4.003 |
| 12/27/2005 20:00 | 27.224 | 38.151 | 32.3 | 41.433 | | 4.74 | 20.617 | 4.016 |
| 12/28/2005 0:00 | 27.237 | 38.178 | 32.329 | 41.433 | | 4.773 | 20.594 | 4.011 |
| 12/28/2005 4:00 | 27.264 | 38.208 | 32.367 | 41.449 | | 4.74 | 20.555 | 4.017 |
| 12/28/2005 8:00 | 27.286 | 38.244 | 32.411 | 41.479 | | 4.75 | 20.586 | 4.024 |
| 12/28/2005 12:00 | 27.308 | 38.279 | 32.435 | 41.525 | | 4.773 | 20.679 | 4.022 |
| 12/28/2005 16:00 | 27.296 | 38.255 | 32.431 | 41.5 | | 4.767 | 20.841 | 4.026 |
| 12/28/2005 20:00 | 27.318 | 38.289 | 32.453 | 41.546 | | 4.76 | 20.698 | 4.028 |
| 12/29/2005 0:00 | 27.341 | 38.319 | 32.485 | 41.564 | | 4.775 | 20.625 | 4.034 |
| 12/29/2005 4:00 | 27.333 | 38.317 | 32.493 | 41.576 | | 4.796 | 20.673 | 4.036 |
| 12/29/2005 8:00 | 27.343 | 38.326 | 32.493 | 41.581 | | 4.775 | 20.69 | 4.036 |
| 12/29/2005 12:00 | 27.348 | 38.328 | 32.497 | 41.592 | | 4.775 | 20.729 | 4.036 |
| 12/29/2005 16:00 | 27.316 | 38.262 | 32.445 | 41.562 | | 4.777 | 20.87 | 4.032 |
| 12/29/2005 20:00 | 27.304 | 38.238 | 32.423 | 41.511 | | 4.762 | 20.838 | 4.038 |
| 12/30/2005 0:00 | 27.294 | 38.212 | 32.387 | 41.527 | | 4.789 | 20.855 | 4.03 |
| 12/30/2005 4:00 | 27.299 | 38.227 | 32.399 | 41.497 | | 4.783 | 20.793 | 4.036 |
| 12/30/2005 8:00 | 27.321 | 38.272 | 32.429 | 41.518 | | 4.774 | 20.749 | 4.038 |
| 12/30/2005 12:00 | 27.348 | 38.304 | 32.457 | 41.544 | | 4.787 | 20.828 | 4.04 |
| 12/30/2005 16:00 | 27.351 | 38.306 | 32.467 | 41.583 | | 4.789 | 20.938 | 4.044 |
| 12/30/2005 20:00 | 27.381 | 38.347 | 32.505 | 41.604 | | 4.804 | 20.803 | 4.048 |
| 12/31/2005 0:00 | 27.403 | 38.385 | 32.536 | 41.594 | | 4.797 | 20.699 | 4.055 |
| 12/31/2005 4:00 | 27.416 | 38.411 | 32.56 | 41.645 | | 4.807 | 20.679 | 4.057 |
| 12/31/2005 8:00 | 27.423 | 38.42 | 32.572 | 41.636 | | 4.799 | 20.693 | 4.057 |
| 12/31/2005 12:00 | 27.438 | 38.445 | 32.59 | 41.678 | | 4.776 | 20.753 | 4.059 |
| 12/31/2005 16:00 | 27.393 | 38.351 | 32.534 | 41.645 | | 4.789 | 21.016 | 4.055 |
| 12/31/2005 20:00 | 27.4 | 38.355 | 32.522 | 41.608 | | 4.789 | 20.908 | 4.057 |
| 1/1/2006 0:00 | 27.381 | 38.33 | 32.499 | 41.622 | | 4.814 | 20.931 | 4.052 |
| 1/1/2006 4:00 | 27.373 | 38.311 | 32.473 | 41.574 | | 4.787 | 20.927 | 4.05 |
| 1/1/2006 8:00 | 27.351 | 38.279 | 32.439 | 41.588 | | 4.785 | 20.944 | 4.046 |
| 1/1/2006 12:00 | 27.339 | 38.251 | 32.403 | 41.569 | | 4.783 | 21.03 | 4.042 |
| 1/1/2006 16:00 | 27.321 | 38.189 | 32.352 | 41.507 | | 4.768 | 20.906 | 4.039 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 1/1/2006 20:00 | 27.284 | 38.259 | 32.373 | 41.534 | | 4.766 | 20.739 | 4.043 |
| 1/2/2006 0:00 | 27.359 | 38.296 | 32.393 | 41.544 | | 4.79 | 20.743 | 4.05 |
| 1/2/2006 4:00 | 27.406 | 38.394 | 32.473 | 41.594 | | 4.803 | 20.759 | 4.06 |
| 1/2/2006 8:00 | 27.468 | 38.513 | 32.572 | 41.643 | | 4.807 | 20.745 | 4.073 |
| 1/2/2006 12:00 | 27.517 | 38.595 | 32.638 | 41.673 | | 4.78 | 20.819 | 4.075 |
| 1/2/2006 16:00 | 27.557 | 38.644 | 32.696 | 41.749 | | 4.805 | 20.811 | 4.086 |
| 1/2/2006 20:00 | 27.599 | 38.72 | 32.759 | 41.798 | | 4.797 | 20.801 | 4.09 |
| 1/3/2006 0:00 | 27.609 | 38.72 | 32.783 | 41.828 | | 4.803 | 20.799 | 4.09 |
| 1/3/2006 4:00 | 27.616 | 38.712 | 32.801 | 41.837 | | 4.819 | 20.798 | 4.094 |
| 1/3/2006 8:00 | 27.604 | 38.695 | 32.797 | 41.807 | | 4.842 | 20.821 | 4.094 |
| 1/3/2006 12:00 | 27.579 | 38.663 | 32.785 | 41.842 | | 4.799 | 20.918 | 4.09 |
| 1/3/2006 16:00 | 27.527 | 38.537 | 32.694 | 41.779 | | 4.823 | 21.136 | 4.081 |
| 1/3/2006 20:00 | 27.524 | 38.52 | 32.69 | 41.731 | | 4.799 | 21.064 | 4.088 |
| 1/4/2006 0:00 | 27.547 | 38.548 | 32.708 | 41.765 | | 4.793 | 20.999 | 4.092 |
| 1/4/2006 4:00 | 27.611 | 38.677 | 32.801 | 41.819 | | 4.811 | 20.889 | 4.107 |
| 1/4/2006 8:00 | 27.663 | 38.763 | 32.871 | 41.853 | | 4.825 | 20.856 | 4.111 |
| 1/4/2006 12:00 | 27.688 | 38.808 | 32.91 | 41.92 | | 4.821 | 20.902 | 4.113 |
| 1/4/2006 16:00 | 27.69 | 38.789 | 32.921 | 41.932 | | 4.817 | 21.138 | 4.113 |
| 1/4/2006 20:00 | 27.711 | 38.827 | 32.958 | 41.953 | | 4.823 | 20.949 | 4.121 |
| 1/5/2006 0:00 | 27.728 | 38.853 | 32.984 | 41.973 | | 4.831 | 20.838 | 4.119 |
| 1/5/2006 4:00 | 27.745 | 38.883 | 33.006 | 41.992 | | 4.819 | 20.813 | 4.124 |
| 1/5/2006 8:00 | 27.735 | 38.891 | 33.032 | 42.008 | | 4.831 | 20.906 | 4.128 |
| 1/5/2006 12:00 | 27.772 | 38.917 | 33.054 | 42.033 | | 4.835 | 21.061 | 4.128 |
| 1/5/2006 16:00 | 27.777 | 38.908 | 33.066 | 42.033 | | 4.85 | 21.181 | 4.132 |
| 1/5/2006 20:00 | 27.782 | 38.929 | 33.08 | 42.05 | | 4.837 | 21.053 | 4.134 |
| 1/6/2006 0:00 | 27.79 | 38.951 | 33.094 | 42.063 | | 4.833 | 20.985 | 4.134 |
| 1/6/2006 4:00 | 27.8 | 38.949 | 33.096 | 42.068 | | 4.844 | 21.003 | 4.134 |
| 1/6/2006 8:00 | 27.787 | 38.928 | 33.092 | 42.036 | | 4.844 | 21.024 | 4.136 |
| 1/6/2006 12:00 | 27.777 | 38.904 | 33.068 | 42.061 | | 4.823 | 21.123 | 4.127 |
| 1/6/2006 16:00 | 27.71 | 38.776 | 32.988 | 42.006 | | 4.844 | 21.187 | 4.119 |
| 1/6/2006 20:00 | 27.705 | 38.742 | 32.963 | 41.948 | | 4.817 | 21.076 | 4.119 |
| 1/7/2006 0:00 | 27.685 | 38.707 | 32.935 | 41.955 | | 4.86 | 21.049 | 4.117 |
| 1/7/2006 4:00 | 27.678 | 38.695 | 32.921 | 41.948 | | 4.835 | 21.051 | 4.117 |
| 1/7/2006 8:00 | 27.683 | 38.691 | 32.913 | 41.904 | | 4.831 | 21.04 | 4.117 |
| 1/7/2006 12:00 | 27.673 | 38.677 | 32.893 | 41.932 | | 4.833 | 21.17 | 4.11 |
| 1/7/2006 16:00 | 27.616 | 38.588 | 32.833 | 41.867 | | 4.827 | 21.141 | 4.101 |
| 1/7/2006 20:00 | 27.599 | 38.558 | 32.799 | 41.862 | | 4.81 | 21.028 | 4.101 |
| 1/8/2006 0:00 | 27.579 | 38.5 | 32.758 | 41.83 | | 4.818 | 21.018 | 4.095 |
| 1/8/2006 4:00 | 27.554 | 38.451 | 32.702 | 41.763 | | 4.827 | 21.024 | 4.091 |
| 1/8/2006 8:00 | 27.564 | 38.486 | 32.722 | 41.786 | | 4.849 | 20.955 | 4.099 |
| 1/8/2006 12:00 | 27.616 | 38.584 | 32.781 | 41.789 | | 4.866 | 21.011 | 4.11 |
| 1/8/2006 16:00 | 27.68 | 38.707 | 32.867 | 41.846 | | 4.847 | 20.986 | 4.122 |
| 1/8/2006 20:00 | 27.775 | 38.889 | 32.99 | 41.929 | | 4.847 | 21.075 | 4.135 |
| 1/9/2006 0:00 | 27.837 | 39 | 33.09 | 42.031 | | 4.87 | 21.108 | 4.143 |
| 1/9/2006 4:00 | 27.869 | 39.049 | 33.148 | 42.089 | | 4.862 | 21.116 | 4.15 |
| 1/9/2006 8:00 | 27.924 | 39.115 | 33.209 | 42.135 | | 4.858 | 21.191 | 4.158 |
| 1/9/2006 12:00 | 27.961 | 39.194 | 33.269 | 42.195 | | 4.86 | 21.193 | 4.16 |
| 1/9/2006 16:00 | 27.963 | 39.16 | 33.281 | 42.202 | | 4.858 | 21.317 | 4.16 |
| 1/9/2006 20:00 | 27.971 | 39.139 | 33.289 | 42.19 | | 4.868 | 21.197 | 4.164 |
| 1/10/2006 0:00 | 27.971 | 39.122 | 33.293 | 42.202 | | 4.858 | 21.108 | 4.162 |
| 1/10/2006 4:00 | 27.934 | 39.085 | 33.287 | 42.223 | | 4.86 | 21.164 | 4.166 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 1/10/2006 8:00 | 27.929 | 39.008 | 33.247 | 42.193 | | 4.866 | 21.23 | 4.162 |
| 1/10/2006 12:00 | 27.924 | 38.996 | 33.231 | 42.19 | | 4.858 | 21.301 | 4.16 |
| 1/10/2006 16:00 | 27.876 | 38.891 | 33.17 | 42.114 | | 4.834 | 21.414 | 4.151 |
| 1/10/2006 20:00 | 27.869 | 38.867 | 33.15 | 42.126 | | 4.843 | 21.168 | 4.151 |
| 1/11/2006 0:00 | 27.857 | 38.852 | 33.136 | 42.112 | | 4.849 | 21.152 | 4.149 |
| 1/11/2006 4:00 | 27.825 | 38.806 | 33.098 | 42.061 | | 4.869 | 21.201 | 4.145 |
| 1/11/2006 8:00 | 27.79 | 38.767 | 33.066 | 42.063 | | 4.849 | 21.228 | 4.143 |
| 1/11/2006 12:00 | 27.819 | 38.793 | 33.064 | 42.063 | | 4.849 | 21.292 | 4.145 |
| 1/11/2006 16:00 | 27.797 | 38.759 | 33.044 | 42.047 | | 4.849 | 21.259 | 4.14 |
| 1/11/2006 20:00 | 27.81 | 38.778 | 33.046 | 42.043 | | 4.873 | 21.148 | 4.142 |
| 1/12/2006 0:00 | 27.812 | 38.803 | 33.042 | 42.043 | | 4.851 | 21.104 | 4.14 |
| 1/12/2006 4:00 | 27.8 | 38.788 | 33.03 | 42.008 | | 4.851 | 21.081 | 4.136 |
| 1/12/2006 8:00 | 27.79 | 38.759 | 33.012 | 42.02 | | 4.869 | 21.085 | 4.136 |
| 1/12/2006 12:00 | 27.802 | 38.776 | 33.014 | 42.026 | | 4.845 | 21.195 | 4.138 |
| 1/12/2006 16:00 | 27.797 | 38.773 | 33.016 | 41.987 | | 4.853 | 21.35 | 4.142 |
| 1/12/2006 20:00 | 27.859 | 38.899 | 33.094 | 42.07 | | 4.867 | 21.19 | 4.153 |
| 1/13/2006 0:00 | 27.911 | 38.981 | 33.161 | 42.119 | | 4.865 | 21.126 | 4.161 |
| 1/13/2006 4:00 | 27.936 | 39.028 | 33.205 | 42.149 | | 4.88 | 21.087 | 4.168 |
| 1/13/2006 8:00 | 27.976 | 39.122 | 33.271 | 42.193 | | 4.875 | 21.143 | 4.178 |
| 1/13/2006 12:00 | 28.028 | 39.2 | 33.329 | 42.216 | | 4.892 | 21.265 | 4.182 |
| 1/13/2006 16:00 | 28.035 | 39.205 | 33.349 | 42.262 | | 4.89 | 21.377 | 4.184 |
| 1/13/2006 20:00 | 28.053 | 39.226 | 33.367 | 42.264 | | 4.886 | 21.244 | 4.184 |
| 1/14/2006 0:00 | 28.063 | 39.23 | 33.385 | 42.308 | | 4.89 | 21.155 | 4.187 |
| 1/14/2006 4:00 | 28.065 | 39.226 | 33.391 | 42.287 | | 4.887 | 21.211 | 4.186 |
| 1/14/2006 8:00 | 28.06 | 39.205 | 33.391 | 42.322 | | 4.892 | 21.207 | 4.191 |
| 1/14/2006 12:00 | 28.055 | 39.179 | 33.373 | 42.287 | | 4.875 | 21.325 | 4.184 |
| 1/14/2006 16:00 | 28.006 | 39.047 | 33.313 | 42.269 | | 4.871 | 21.401 | 4.178 |
| 1/14/2006 20:00 | 27.988 | 38.983 | 33.279 | 42.239 | | 4.896 | 21.354 | 4.175 |
| 1/15/2006 0:00 | 27.968 | 38.919 | 33.243 | 42.216 | | 4.875 | 21.366 | 4.171 |
| 1/15/2006 4:00 | 27.939 | 38.848 | 33.205 | 42.184 | | 4.855 | 21.389 | 4.167 |
| 1/15/2006 8:00 | 27.916 | 38.795 | 33.182 | 42.154 | | 4.879 | 21.397 | 4.165 |
| 1/15/2006 12:00 | 27.919 | 38.78 | 33.164 | 42.147 | | 4.861 | 21.453 | 4.161 |
| 1/15/2006 16:00 | 27.897 | 38.716 | 33.138 | 42.087 | | 4.848 | 21.348 | 4.158 |
| 1/15/2006 20:00 | 27.899 | 38.72 | 33.142 | 42.123 | | 4.873 | 21.209 | 4.159 |
| 1/16/2006 0:00 | 27.907 | 38.716 | 33.142 | 42.091 | | 4.854 | 21.145 | 4.158 |
| 1/16/2006 4:00 | 27.919 | 38.741 | 33.159 | 42.098 | | 4.848 | 21.097 | 4.163 |
| 1/16/2006 8:00 | 27.934 | 38.806 | 33.209 | 42.126 | | 4.844 | 21.157 | 4.175 |
| 1/16/2006 12:00 | 27.998 | 38.887 | 33.267 | 42.207 | | 4.861 | 21.255 | 4.179 |
| 1/16/2006 16:00 | 28.028 | 38.921 | 33.309 | 42.204 | | 4.865 | 21.238 | 4.188 |
| 1/16/2006 20:00 | 28.058 | 38.987 | 33.364 | 42.276 | | 4.91 | 21.269 | 4.194 |
| 1/17/2006 0:00 | 28.095 | 39.03 | 33.402 | 42.278 | | 4.889 | 21.267 | 4.196 |
| 1/17/2006 4:00 | 28.11 | 39.034 | 33.424 | 42.299 | | 4.887 | 21.279 | 4.2 |
| 1/17/2006 8:00 | 28.123 | 39.032 | 33.43 | 42.341 | | 4.891 | 21.233 | 4.2 |
| 1/17/2006 12:00 | 28.118 | 39.009 | 33.424 | 42.35 | | 4.868 | 21.314 | 4.198 |
| 1/17/2006 16:00 | 28.095 | 38.955 | 33.402 | 42.322 | | 4.873 | 21.484 | 4.203 |
| 1/17/2006 20:00 | 28.112 | 38.989 | 33.424 | 42.343 | | 4.879 | 21.362 | 4.202 |
| 1/18/2006 0:00 | 28.122 | 38.994 | 33.433 | 42.345 | | 4.885 | 21.304 | 4.204 |
| 1/18/2006 4:00 | 28.12 | 38.985 | 33.426 | 42.35 | | 4.87 | 21.3 | 4.205 |
| 1/18/2006 8:00 | 28.115 | 38.955 | 33.427 | 42.32 | | 4.87 | 21.322 | 4.206 |
| 1/18/2006 12:00 | 28.13 | 38.968 | 33.437 | 42.354 | | 4.889 | 21.384 | 4.206 |
| 1/18/2006 16:00 | 28.11 | 38.917 | 33.402 | 42.338 | | 4.892 | 21.61 | 4.202 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 1/18/2006 20:00 | 28.103 | 38.902 | 33.4 | 42.299 | | 4.864 | 21.426 | 4.205 |
| 1/19/2006 0:00 | 28.108 | 38.893 | 33.401 | 42.297 | | 4.881 | 21.356 | 4.204 |
| 1/19/2006 4:00 | 28.093 | 38.857 | 33.381 | 42.283 | | 4.877 | 21.335 | 4.202 |
| 1/19/2006 8:00 | 28.097 | 38.853 | 33.383 | 42.278 | | 4.899 | 21.322 | 4.202 |
| 1/19/2006 12:00 | 28.118 | 38.908 | 33.426 | 42.301 | | 4.893 | 21.418 | 4.21 |
| 1/19/2006 16:00 | 28.157 | 38.966 | 33.47 | 42.364 | | 4.899 | 21.538 | 4.216 |
| 1/19/2006 20:00 | 28.207 | 39.077 | 33.536 | 42.387 | | 4.891 | 21.362 | 4.227 |
| 1/20/2006 0:00 | 28.241 | 39.137 | 33.576 | 42.431 | | 4.92 | 21.325 | 4.227 |
| 1/20/2006 4:00 | 28.249 | 39.153 | 33.586 | 42.477 | | 4.881 | 21.395 | 4.223 |
| 1/20/2006 8:00 | 28.252 | 39.173 | 33.603 | 42.498 | | 4.891 | 21.394 | 4.229 |
| 1/20/2006 12:00 | 28.264 | 39.177 | 33.613 | 42.509 | | 4.891 | 21.391 | 4.229 |
| 1/20/2006 16:00 | 28.252 | 39.156 | 33.609 | 42.505 | | 4.901 | 21.409 | 4.231 |
| 1/20/2006 20:00 | 28.286 | 39.237 | 33.665 | 42.537 | | 4.895 | 21.345 | 4.242 |
| 1/21/2006 0:00 | 28.324 | 39.294 | 33.701 | 42.542 | | 4.918 | 21.38 | 4.246 |
| 1/21/2006 4:00 | 28.343 | 39.328 | 33.727 | 42.599 | | 4.922 | 21.355 | 4.248 |
| 1/21/2006 8:00 | 28.351 | 39.331 | 33.741 | 42.616 | | 4.916 | 21.349 | 4.25 |
| 1/21/2006 12:00 | 28.368 | 39.365 | 33.767 | 42.639 | | 4.91 | 21.392 | 4.254 |
| 1/21/2006 16:00 | 28.361 | 39.331 | 33.761 | 42.643 | | 4.945 | 21.583 | 4.252 |
| 1/21/2006 20:00 | 28.363 | 39.318 | 33.765 | 42.648 | | 4.922 | 21.498 | 4.254 |
| 1/22/2006 0:00 | 28.371 | 39.318 | 33.775 | 42.659 | | 4.93 | 21.426 | 4.256 |
| 1/22/2006 4:00 | 28.381 | 39.333 | 33.787 | 42.669 | | 4.926 | 21.411 | 4.257 |
| 1/22/2006 8:00 | 28.386 | 39.326 | 33.798 | 42.671 | | 4.907 | 21.401 | 4.263 |
| 1/22/2006 12:00 | 28.391 | 39.339 | 33.805 | 42.655 | | 4.911 | 21.463 | 4.261 |
| 1/22/2006 16:00 | 28.361 | 39.277 | 33.775 | 42.634 | | 4.911 | 21.713 | 4.258 |
| 1/22/2006 20:00 | 28.388 | 39.301 | 33.808 | 42.652 | | 4.904 | 21.618 | 4.265 |
| 1/23/2006 0:00 | 28.383 | 39.299 | 33.807 | 42.687 | | 4.895 | 21.581 | 4.262 |
| 1/23/2006 4:00 | 28.386 | 39.284 | 33.805 | 42.694 | | 4.899 | 21.572 | 4.262 |
| 1/23/2006 8:00 | 28.378 | 39.264 | 33.799 | 42.685 | | 4.899 | 21.577 | 4.262 |
| 1/23/2006 12:00 | 28.386 | 39.275 | 33.8 | 42.694 | | 4.909 | 21.608 | 4.262 |
| 1/23/2006 16:00 | 28.356 | 39.188 | 33.751 | 42.657 | | 4.917 | 21.798 | 4.258 |
| 1/23/2006 20:00 | 28.338 | 39.156 | 33.735 | 42.599 | | 4.897 | 21.711 | 4.258 |
| 1/24/2006 0:00 | 28.321 | 39.139 | 33.721 | 42.62 | | 4.889 | 21.653 | 4.252 |
| 1/24/2006 4:00 | 28.329 | 39.149 | 33.729 | 42.616 | | 4.913 | 21.637 | 4.256 |
| 1/24/2006 8:00 | 28.353 | 39.215 | 33.779 | 42.616 | | 4.926 | 21.552 | 4.264 |
| 1/24/2006 12:00 | 28.376 | 39.299 | 33.83 | 42.692 | | 4.903 | 21.639 | 4.27 |
| 1/24/2006 16:00 | 28.403 | 39.292 | 33.824 | 42.696 | | 4.924 | 21.874 | 4.268 |
| 1/24/2006 20:00 | 28.435 | 39.373 | 33.88 | 42.701 | | 4.899 | 21.639 | 4.281 |
| 1/25/2006 0:00 | 28.463 | 39.439 | 33.916 | 42.74 | | 4.919 | 21.448 | 4.283 |
| 1/25/2006 4:00 | 28.47 | 39.463 | 33.934 | 42.793 | | 4.913 | 21.541 | 4.283 |
| 1/25/2006 8:00 | 28.458 | 39.469 | 33.942 | 42.78 | | 4.909 | 21.584 | 4.283 |
| 1/25/2006 12:00 | 28.502 | 39.512 | 33.97 | 42.837 | | 4.915 | 21.659 | 4.287 |
| 1/25/2006 16:00 | 28.477 | 39.452 | 33.936 | 42.819 | | 4.926 | 21.843 | 4.281 |
| 1/25/2006 20:00 | 28.465 | 39.418 | 33.918 | 42.81 | | 4.961 | 21.752 | 4.28 |
| 1/26/2006 0:00 | 28.46 | 39.399 | 33.91 | 42.8 | | 4.971 | 21.648 | 4.279 |
| 1/26/2006 4:00 | 28.448 | 39.38 | 33.908 | 42.791 | | 4.952 | 21.622 | 4.281 |
| 1/26/2006 8:00 | 28.445 | 39.372 | 33.902 | 42.786 | | 4.944 | 21.624 | 4.283 |
| 1/26/2006 12:00 | 28.453 | 39.375 | 33.9 | 42.789 | | 4.924 | 21.764 | 4.28 |
| 1/26/2006 16:00 | 28.418 | 39.311 | 33.864 | 42.763 | | 4.938 | 21.783 | 4.275 |
| 1/26/2006 20:00 | 28.415 | 39.311 | 33.866 | 42.752 | | 4.975 | 21.75 | 4.278 |
| 1/27/2006 0:00 | 28.438 | 39.335 | 33.874 | 42.759 | | 4.934 | 21.725 | 4.28 |
| 1/27/2006 4:00 | 28.436 | 39.335 | 33.884 | 42.763 | | 4.942 | 21.669 | 4.28 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 1/27/2006 8:00 | 28.425 | 39.358 | 33.898 | 42.773 | | 4.946 | 21.626 | 4.285 |
| 1/27/2006 12:00 | 28.51 | 39.375 | 33.91 | 42.793 | | 4.95 | 21.744 | 4.285 |
| 1/27/2006 16:00 | 28.465 | 39.322 | 33.876 | 42.77 | | 4.944 | 21.874 | 4.278 |
| 1/27/2006 20:00 | 28.458 | 39.328 | 33.882 | 42.761 | | 4.954 | 21.723 | 4.282 |
| 1/28/2006 0:00 | 28.47 | 39.339 | 33.89 | 42.738 | | 4.948 | 21.626 | 4.284 |
| 1/28/2006 4:00 | 28.451 | 39.311 | 33.864 | 42.756 | | 4.942 | 21.725 | 4.276 |
| 1/28/2006 8:00 | 28.406 | 39.239 | 33.843 | 42.736 | | 4.924 | 21.729 | 4.267 |
| 1/28/2006 12:00 | 28.369 | 39.156 | 33.816 | 42.713 | | 4.886 | 21.681 | 4.261 |
| 1/28/2006 16:00 | 28.309 | 39.028 | 33.765 | 42.676 | | 4.911 | 21.729 | 4.243 |
| 1/28/2006 20:00 | 28.289 | 38.981 | 33.775 | 42.625 | | 4.911 | 21.59 | 4.241 |
| 1/29/2006 0:00 | 28.264 | 38.953 | 33.767 | 42.643 | | 4.889 | 21.563 | 4.231 |
| 1/29/2006 4:00 | 28.262 | 38.976 | 33.805 | 42.627 | | 4.899 | 21.454 | 4.226 |
| 1/29/2006 8:00 | 28.269 | 39.01 | 33.835 | 42.683 | | 4.911 | 21.396 | 4.222 |
| 1/29/2006 12:00 | 28.289 | 39.051 | 33.866 | 42.683 | | 4.915 | 21.495 | 4.216 |
| 1/29/2006 16:00 | 28.277 | 39.01 | 33.862 | 42.715 | | 4.924 | 21.662 | 4.21 |
| 1/29/2006 20:00 | 28.299 | 39.077 | 33.908 | 42.719 | | 4.896 | 21.534 | 4.209 |
| 1/30/2006 0:00 | 28.307 | 39.089 | 33.928 | 42.773 | | 4.922 | 21.451 | 4.205 |
| 1/30/2006 4:00 | 28.312 | 39.1 | 33.944 | 42.786 | | 4.924 | 21.452 | 4.203 |
| 1/30/2006 8:00 | 28.319 | 39.115 | 33.966 | 42.8 | | 4.929 | 21.474 | 4.205 |
| 1/30/2006 12:00 | 28.354 | 39.168 | 33.998 | 42.835 | | 4.927 | 21.576 | 4.207 |
| 1/30/2006 16:00 | 28.326 | 39.156 | 34 | 42.844 | | 4.964 | 21.78 | 4.203 |
| 1/30/2006 20:00 | 28.352 | 39.168 | 34.012 | 42.83 | | 4.94 | 21.638 | 4.205 |
| 1/31/2006 0:00 | 28.354 | 39.143 | 33.998 | 42.86 | | 4.95 | 21.557 | 4.2 |
| 1/31/2006 4:00 | 28.346 | 39.115 | 33.984 | 42.856 | | 4.929 | 21.534 | 4.196 |
| 1/31/2006 8:00 | 28.322 | 39.068 | 33.962 | 42.837 | | 4.959 | 21.565 | 4.194 |
| 1/31/2006 12:00 | 28.295 | 39.038 | 33.944 | 42.828 | | 4.932 | 21.731 | 4.192 |
| 1/31/2006 16:00 | 28.272 | 38.944 | 33.89 | 42.796 | | 4.93 | 21.776 | 4.181 |
| 1/31/2006 20:00 | 28.272 | 38.959 | 33.91 | 42.786 | | 4.96 | 21.658 | 4.191 |
| 2/1/2006 0:00 | 28.295 | 38.993 | 33.926 | 42.796 | | 4.977 | 21.569 | 4.191 |
| 2/1/2006 4:00 | 28.324 | 39.062 | 33.962 | 42.8 | | 4.929 | 21.565 | 4.193 |
| 2/1/2006 8:00 | 28.324 | 39.079 | 33.984 | 42.847 | | 4.954 | 21.54 | 4.197 |
| 2/1/2006 12:00 | 28.344 | 39.096 | 33.992 | 42.86 | | 4.952 | 21.687 | 4.199 |
| 2/1/2006 16:00 | 28.329 | 39.049 | 33.96 | 42.849 | | 4.944 | 21.842 | 4.195 |
| 2/1/2006 20:00 | 28.329 | 39.045 | 33.964 | 42.847 | | 4.96 | 21.722 | 4.199 |
| 2/2/2006 0:00 | 28.322 | 39.032 | 33.956 | 42.817 | | 4.952 | 21.689 | 4.197 |
| 2/2/2006 4:00 | 28.317 | 39.006 | 33.944 | 42.807 | | 4.952 | 21.677 | 4.199 |
| 2/2/2006 8:00 | 28.302 | 38.989 | 33.928 | 42.821 | | 4.954 | 21.656 | 4.195 |
| 2/2/2006 12:00 | 28.307 | 38.993 | 33.924 | 42.789 | | 4.931 | 21.77 | 4.197 |
| 2/2/2006 16:00 | 28.302 | 38.978 | 33.924 | 42.786 | | 4.973 | 21.857 | 4.199 |
| 2/2/2006 20:00 | 28.322 | 39.025 | 33.958 | 42.81 | | 4.946 | 21.727 | 4.205 |
| 2/3/2006 0:00 | 28.342 | 39.068 | 33.982 | 42.853 | | 4.958 | 21.654 | 4.209 |
| 2/3/2006 4:00 | 28.369 | 39.121 | 34.018 | 42.877 | | 4.973 | 21.586 | 4.217 |
| 2/3/2006 8:00 | 28.402 | 39.205 | 34.069 | 42.909 | | 4.975 | 21.646 | 4.227 |
| 2/3/2006 12:00 | 28.441 | 39.282 | 34.109 | 42.953 | | 4.969 | 21.701 | 4.233 |
| 2/3/2006 16:00 | 28.448 | 39.282 | 34.107 | 42.974 | | 4.971 | 21.863 | 4.23 |
| 2/3/2006 20:00 | 28.474 | 39.335 | 34.145 | 42.999 | | 4.969 | 21.689 | 4.239 |
| 2/4/2006 0:00 | 28.491 | 39.375 | 34.171 | 42.994 | | 4.977 | 21.555 | 4.245 |
| 2/4/2006 4:00 | 28.503 | 39.393 | 34.183 | 43.041 | | 4.989 | 21.71 | 4.247 |
| 2/4/2006 8:00 | 28.513 | 39.414 | 34.199 | 43.061 | | 4.96 | 21.666 | 4.251 |
| 2/4/2006 12:00 | 28.515 | 39.427 | 34.207 | 43.048 | | 4.952 | 21.761 | 4.253 |
| 2/4/2006 16:00 | 28.513 | 39.371 | 34.171 | 43.068 | | 4.979 | 21.97 | 4.251 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 2/4/2006 20:00 | 28.508 | 39.356 | 34.169 | 43.078 | | 4.977 | 21.85 | 4.251 |
| 2/5/2006 0:00 | 28.496 | 39.352 | 34.161 | 43.073 | | 4.979 | 21.809 | 4.251 |
| 2/5/2006 4:00 | 28.494 | 39.331 | 34.149 | 43.068 | | 4.975 | 21.821 | 4.253 |
| 2/5/2006 8:00 | 28.489 | 39.322 | 34.147 | 43.029 | | 4.991 | 21.828 | 4.257 |
| 2/5/2006 12:00 | 28.498 | 39.367 | 34.173 | 43.073 | | 4.95 | 21.855 | 4.261 |
| 2/5/2006 16:00 | 28.498 | 39.335 | 34.151 | 43.068 | | 4.96 | 22.055 | 4.257 |
| 2/5/2006 20:00 | 28.533 | 39.41 | 34.213 | 43.089 | | 4.958 | 21.815 | 4.271 |
| 2/6/2006 0:00 | 28.553 | 39.469 | 34.243 | 43.117 | | 4.971 | 21.751 | 4.271 |
| 2/6/2006 4:00 | 28.57 | 39.499 | 34.259 | 43.142 | | 4.966 | 21.722 | 4.273 |
| 2/6/2006 8:00 | 28.585 | 39.525 | 34.284 | 43.161 | | 4.96 | 21.681 | 4.282 |
| 2/6/2006 12:00 | 28.618 | 39.58 | 34.318 | 43.163 | | 4.977 | 21.708 | 4.284 |
| 2/6/2006 16:00 | 28.605 | 39.55 | 34.297 | 43.2 | | 4.983 | 21.976 | 4.282 |
| 2/6/2006 20:00 | 28.62 | 39.561 | 34.316 | 43.214 | | 5.043 | 21.85 | 4.286 |
| 2/7/2006 0:00 | 28.613 | 39.553 | 34.316 | 43.221 | | 5.006 | 21.809 | 4.286 |
| 2/7/2006 4:00 | 28.618 | 39.561 | 34.324 | 43.228 | | 5.018 | 21.765 | 4.29 |
| 2/7/2006 8:00 | 28.628 | 39.568 | 34.332 | 43.209 | | 5.012 | 21.716 | 4.292 |
| 2/7/2006 12:00 | 28.642 | 39.591 | 34.346 | 43.251 | | 5.004 | 21.786 | 4.293 |
| 2/7/2006 16:00 | 28.613 | 39.54 | 34.302 | 43.219 | | 5.018 | 22.08 | 4.285 |
| 2/7/2006 20:00 | 28.615 | 39.516 | 34.294 | 43.212 | | 5.003 | 22.039 | 4.29 |
| 2/8/2006 0:00 | 28.606 | 39.501 | 34.289 | 43.23 | | 4.991 | 21.982 | 4.292 |
| 2/8/2006 4:00 | 28.61 | 39.516 | 34.306 | 43.232 | | 4.993 | 21.914 | 4.296 |
| 2/8/2006 8:00 | 28.642 | 39.57 | 34.352 | 43.255 | | 4.995 | 21.827 | 4.302 |
| 2/8/2006 12:00 | 28.667 | 39.636 | 34.39 | 43.255 | | 5.008 | 21.751 | 4.307 |
| 2/8/2006 16:00 | 28.667 | 39.625 | 34.374 | 43.292 | | 4.985 | 21.988 | 4.303 |
| 2/8/2006 20:00 | 28.682 | 39.651 | 34.398 | 43.279 | | 5.001 | 21.838 | 4.31 |
| 2/9/2006 0:00 | 28.702 | 39.691 | 34.42 | 43.304 | | 4.995 | 21.732 | 4.312 |
| 2/9/2006 4:00 | 28.672 | 39.67 | 34.398 | 43.313 | | 4.981 | 21.891 | 4.307 |
| 2/9/2006 8:00 | 28.663 | 39.597 | 34.354 | 43.295 | | 4.977 | 21.989 | 4.305 |
| 2/9/2006 12:00 | 28.65 | 39.561 | 34.324 | 43.286 | | 4.99 | 22.084 | 4.301 |
| 2/9/2006 16:00 | 28.606 | 39.45 | 34.265 | 43.265 | | 4.993 | 22.129 | 4.295 |
| 2/9/2006 20:00 | 28.608 | 39.476 | 34.287 | 43.249 | | 5.018 | 22.11 | 4.3 |
| 2/10/2006 0:00 | 28.628 | 39.538 | 34.324 | 43.235 | | 4.988 | 21.98 | 4.305 |
| 2/10/2006 4:00 | 28.642 | 39.557 | 34.34 | 43.274 | | 5.004 | 21.947 | 4.307 |
| 2/10/2006 8:00 | 28.652 | 39.58 | 34.36 | 43.26 | | 5.014 | 21.912 | 4.315 |
| 2/10/2006 12:00 | 28.675 | 39.608 | 34.376 | 43.304 | | 4.983 | 21.997 | 4.315 |
| 2/10/2006 16:00 | 28.663 | 39.578 | 34.354 | 43.276 | | 4.983 | 22.164 | 4.314 |
| 2/10/2006 20:00 | 28.687 | 39.628 | 34.404 | 43.297 | | 5.01 | 22.005 | 4.322 |
| 2/11/2006 0:00 | 28.705 | 39.659 | 34.418 | 43.343 | | 5.01 | 21.885 | 4.322 |
| 2/11/2006 4:00 | 28.695 | 39.653 | 34.412 | 43.357 | | 5.016 | 21.873 | 4.32 |
| 2/11/2006 8:00 | 28.707 | 39.659 | 34.43 | 43.334 | | 5.008 | 21.858 | 4.326 |
| 2/11/2006 12:00 | 28.732 | 39.715 | 34.462 | 43.385 | | 5.004 | 21.827 | 4.334 |
| 2/11/2006 16:00 | 28.737 | 39.719 | 34.462 | 43.399 | | 4.996 | 21.879 | 4.331 |
| 2/11/2006 20:00 | 28.747 | 39.728 | 34.468 | 43.378 | | 5 | 21.844 | 4.332 |
| 2/12/2006 0:00 | 28.74 | 39.706 | 34.448 | 43.41 | | 5.037 | 21.904 | 4.329 |
| 2/12/2006 4:00 | 28.717 | 39.655 | 34.412 | 43.364 | | 5.033 | 21.939 | 4.327 |
| 2/12/2006 8:00 | 28.7 | 39.615 | 34.394 | 43.376 | | 5.022 | 22.015 | 4.328 |
| 2/12/2006 12:00 | 28.735 | 39.698 | 34.464 | 43.394 | | 5.018 | 21.988 | 4.339 |
| 2/12/2006 16:00 | 28.737 | 39.749 | 34.492 | 43.392 | | 5.016 | 22.021 | 4.343 |
| 2/12/2006 20:00 | 28.772 | 39.8 | 34.519 | 43.443 | | 5.016 | 21.868 | 4.347 |
| 2/13/2006 0:00 | 28.737 | 39.783 | 34.494 | 43.452 | | 5.012 | 21.88 | 4.34 |
| 2/13/2006 4:00 | 28.755 | 39.726 | 34.452 | 43.445 | | 5.008 | 21.934 | 4.333 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 2/13/2006 8:00 | 28.722 | 39.644 | 34.406 | 43.41 | | 5.02 | 22.046 | 4.331 |
| 2/13/2006 12:00 | 28.71 | 39.595 | 34.394 | 43.387 | | 4.998 | 22.203 | 4.333 |
| 2/13/2006 16:00 | 28.685 | 39.55 | 34.36 | 43.325 | | 5.012 | 22.147 | 4.324 |
| 2/13/2006 20:00 | 28.705 | 39.585 | 34.402 | 43.352 | | 5.023 | 22.017 | 4.337 |
| 2/14/2006 0:00 | 28.715 | 39.625 | 34.414 | 43.362 | | 4.998 | 21.887 | 4.334 |
| 2/14/2006 4:00 | 28.705 | 39.6 | 34.39 | 43.325 | | 5.002 | 21.912 | 4.329 |
| 2/14/2006 8:00 | 28.695 | 39.576 | 34.386 | 43.327 | | 4.998 | 21.941 | 4.334 |
| 2/14/2006 12:00 | 28.702 | 39.591 | 34.392 | 43.311 | | 4.975 | 22.092 | 4.335 |
| 2/14/2006 16:00 | 28.685 | 39.533 | 34.354 | 43.32 | | 4.988 | 22.162 | 4.329 |
| 2/14/2006 20:00 | 28.702 | 39.583 | 34.4 | 43.329 | | 4.988 | 22 | 4.339 |
| 2/15/2006 0:00 | 28.752 | 39.717 | 34.482 | 43.373 | | 4.996 | 21.909 | 4.35 |
| 2/15/2006 4:00 | 28.769 | 39.77 | 34.509 | 43.403 | | 5.008 | 21.819 | 4.352 |
| 2/15/2006 8:00 | 28.764 | 39.768 | 34.507 | 43.404 | | 5.006 | 21.887 | 4.346 |
| 2/15/2006 12:00 | 28.797 | 39.8 | 34.527 | 43.44 | | 5.008 | 21.899 | 4.351 |
| 2/15/2006 16:00 | 28.779 | 39.74 | 34.486 | 43.438 | | 5.004 | 22.013 | 4.346 |
| 2/15/2006 20:00 | 28.772 | 39.738 | 34.503 | 43.41 | | 5.014 | 21.984 | 4.354 |
| 2/16/2006 0:00 | 28.784 | 39.76 | 34.503 | 43.445 | | 5.031 | 21.965 | 4.347 |
| 2/16/2006 4:00 | 28.774 | 39.721 | 34.474 | 43.438 | | 5.01 | 22.003 | 4.346 |
| 2/16/2006 8:00 | 28.769 | 39.715 | 34.476 | 43.431 | | 4.996 | 22.005 | 4.347 |
| 2/16/2006 12:00 | 28.809 | 39.796 | 34.545 | 43.454 | | 5.012 | 21.849 | 4.363 |
| 2/16/2006 16:00 | 28.851 | 39.896 | 34.603 | 43.459 | | 5.018 | 21.841 | 4.372 |
| 2/16/2006 20:00 | 28.908 | 40.061 | 34.702 | 43.519 | | 5.021 | 21.979 | 4.385 |
| 2/17/2006 0:00 | 28.956 | 40.161 | 34.75 | 43.579 | | 5.035 | 21.965 | 4.384 |
| 2/17/2006 4:00 | 28.978 | 40.204 | 34.772 | 43.628 | | 5.018 | 22.025 | 4.385 |
| 2/17/2006 8:00 | 28.985 | 40.208 | 34.792 | 43.687 | | 5.041 | 21.953 | 4.397 |
| 2/17/2006 12:00 | 29.015 | 40.283 | 34.834 | 43.708 | | 5.035 | 21.924 | 4.397 |
| 2/17/2006 16:00 | 29.005 | 40.223 | 34.796 | 43.724 | | 5.041 | 22.021 | 4.391 |
| 2/17/2006 20:00 | 29.01 | 40.232 | 34.824 | 43.78 | | 5.089 | 21.899 | 4.399 |
| 2/18/2006 0:00 | 29.01 | 40.227 | 34.824 | 43.764 | | 5.06 | 21.876 | 4.396 |
| 2/18/2006 4:00 | 29.02 | 40.225 | 34.834 | 43.808 | | 5.072 | 21.835 | 4.399 |
| 2/18/2006 8:00 | 29.02 | 40.221 | 34.838 | 43.791 | | 5.064 | 21.828 | 4.403 |
| 2/18/2006 12:00 | 29.032 | 40.225 | 34.842 | 43.805 | | 5.058 | 21.95 | 4.4 |
| 2/18/2006 16:00 | 29.007 | 40.14 | 34.784 | 43.819 | | 5.041 | 22.244 | 4.396 |
| 2/18/2006 20:00 | 28.992 | 40.103 | 34.778 | 43.81 | | 5.064 | 22.232 | 4.398 |
| 2/19/2006 0:00 | 28.992 | 40.097 | 34.78 | 43.803 | | 5.033 | 22.194 | 4.4 |
| 2/19/2006 4:00 | 28.985 | 40.08 | 34.77 | 43.794 | | 5.029 | 22.172 | 4.397 |
| 2/19/2006 8:00 | 28.97 | 40.046 | 34.756 | 43.748 | | 5.053 | 22.228 | 4.397 |
| 2/19/2006 12:00 | 28.973 | 40.037 | 34.75 | 43.769 | | 5.033 | 22.368 | 4.396 |
| 2/19/2006 16:00 | 28.946 | 39.952 | 34.7 | 43.718 | | 5.043 | 22.449 | 4.388 |
| 2/19/2006 20:00 | 28.933 | 39.935 | 34.698 | 43.704 | | 5.023 | 22.391 | 4.388 |
| 2/20/2006 0:00 | 28.933 | 39.948 | 34.706 | 43.727 | | 5.023 | 22.368 | 4.387 |
| 2/20/2006 4:00 | 28.928 | 39.927 | 34.693 | 43.711 | | 5.031 | 22.401 | 4.385 |
| 2/20/2006 8:00 | 28.921 | 39.909 | 34.685 | 43.664 | | 5.023 | 22.37 | 4.386 |
| 2/20/2006 12:00 | 28.921 | 39.903 | 34.675 | 43.655 | | 5.025 | 22.525 | 4.387 |
| 2/20/2006 16:00 | 28.901 | 39.839 | 34.637 | 43.632 | | 5.047 | 22.468 | 4.379 |
| 2/20/2006 20:00 | 28.898 | 39.843 | 34.651 | 43.621 | | 5.039 | 22.24 | 4.385 |
| 2/21/2006 0:00 | 28.916 | 39.901 | 34.687 | 43.655 | | 5.025 | 22.104 | 4.389 |
| 2/21/2006 4:00 | 28.928 | 39.928 | 34.697 | 43.66 | | 5.033 | 22.079 | 4.389 |
| 2/21/2006 8:00 | 28.911 | 39.935 | 34.701 | 43.662 | | 5 | 22.103 | 4.391 |
| 2/21/2006 12:00 | 28.936 | 39.939 | 34.698 | 43.632 | | 5.012 | 22.211 | 4.391 |
| 2/21/2006 16:00 | 28.913 | 39.865 | 34.649 | 43.644 | | 4.987 | 22.478 | 4.382 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 2/21/2006 20:00 | 28.906 | 39.873 | 34.669 | 43.632 | | 5.058 | 22.329 | 4.391 |
| 2/22/2006 0:00 | 28.931 | 39.931 | 34.708 | 43.644 | | 5.037 | 22.11 | 4.401 |
| 2/22/2006 4:00 | 28.946 | 39.954 | 34.719 | 43.653 | | 5.035 | 22.091 | 4.396 |
| 2/22/2006 8:00 | 28.961 | 39.98 | 34.737 | 43.667 | | 5.033 | 22.054 | 4.401 |
| 2/22/2006 12:00 | 28.973 | 40.008 | 34.747 | 43.681 | | 5.021 | 22.147 | 4.4 |
| 2/22/2006 16:00 | 28.961 | 39.946 | 34.709 | 43.671 | | 5.039 | 22.508 | 4.395 |
| 2/22/2006 20:00 | 28.968 | 39.995 | 34.756 | 43.657 | | 5.062 | 22.325 | 4.408 |
| 2/23/2006 0:00 | 29 | 40.072 | 34.796 | 43.706 | | 5.058 | 22.112 | 4.412 |
| 2/23/2006 4:00 | 29.008 | 40.088 | 34.8 | 43.718 | | 5.06 | 22.093 | 4.409 |
| 2/23/2006 8:00 | 29.03 | 40.146 | 34.844 | 43.715 | | 5.039 | 22.023 | 4.42 |
| 2/23/2006 12:00 | 29.067 | 40.223 | 34.886 | 43.775 | | 5.031 | 22.195 | 4.421 |
| 2/23/2006 16:00 | 29.07 | 40.204 | 34.868 | 43.789 | | 5.037 | 22.482 | 4.42 |
| 2/23/2006 20:00 | 29.067 | 40.193 | 34.872 | 43.801 | | 5.052 | 22.345 | 4.422 |
| 2/24/2006 0:00 | 29.07 | 40.202 | 34.882 | 43.812 | | 5.031 | 22.171 | 4.423 |
| 2/24/2006 4:00 | 29.06 | 40.168 | 34.856 | 43.782 | | 5.025 | 22.167 | 4.418 |
| 2/24/2006 8:00 | 29.05 | 40.134 | 34.842 | 43.805 | | 5.019 | 22.2 | 4.418 |
| 2/24/2006 12:00 | 29.05 | 40.091 | 34.818 | 43.805 | | 5.081 | 22.417 | 4.418 |
| 2/24/2006 16:00 | 29.015 | 40.042 | 34.79 | 43.773 | | 5.083 | 22.517 | 4.414 |
| 2/24/2006 20:00 | 29.037 | 40.078 | 34.828 | 43.778 | | 5.085 | 22.366 | 4.425 |
| 2/25/2006 0:00 | 29.077 | 40.195 | 34.908 | 43.81 | | 5.081 | 22.132 | 4.436 |
| 2/25/2006 4:00 | 29.119 | 40.302 | 34.967 | 43.849 | | 5.058 | 22.184 | 4.441 |
| 2/25/2006 8:00 | 29.147 | 40.388 | 35.013 | 43.888 | | 5.091 | 22.076 | 4.446 |
| 2/25/2006 12:00 | 29.159 | 40.454 | 35.045 | 43.923 | | 5.103 | 22.287 | 4.446 |
| 2/25/2006 16:00 | 29.171 | 40.418 | 35.019 | 43.944 | | 5.099 | 22.529 | 4.442 |
| 2/25/2006 20:00 | 29.179 | 40.428 | 35.037 | 43.96 | | 5.073 | 22.407 | 4.447 |
| 2/26/2006 0:00 | 29.194 | 40.45 | 35.055 | 43.951 | | 5.073 | 22.277 | 4.452 |
| 2/26/2006 4:00 | 29.194 | 40.447 | 35.055 | 43.992 | | 5.073 | 22.213 | 4.449 |
| 2/26/2006 8:00 | 29.186 | 40.428 | 35.051 | 43.999 | | 5.11 | 22.202 | 4.451 |
| 2/26/2006 12:00 | 29.184 | 40.4 | 35.031 | 43.969 | | 5.089 | 22.386 | 4.447 |
| 2/26/2006 16:00 | 29.142 | 40.285 | 34.959 | 43.972 | | 5.046 | 22.479 | 4.435 |
| 2/26/2006 20:00 | 29.127 | 40.225 | 34.934 | 43.946 | | 5.077 | 22.413 | 4.436 |
| 2/27/2006 0:00 | 29.102 | 40.183 | 34.906 | 43.919 | | 5.037 | 22.322 | 4.43 |
| 2/27/2006 4:00 | 29.075 | 40.117 | 34.872 | 43.888 | | 5.058 | 22.401 | 4.423 |
| 2/27/2006 8:00 | 29.065 | 40.099 | 34.866 | 43.87 | | 5.042 | 22.451 | 4.426 |
| 2/27/2006 12:00 | 29.075 | 40.119 | 34.878 | 43.861 | | 5.056 | 22.463 | 4.425 |
| 2/27/2006 16:00 | 29.055 | 40.085 | 34.858 | 43.845 | | 5.063 | 22.44 | 4.419 |
| 2/27/2006 20:00 | 29.078 | 40.134 | 34.9 | 43.815 | | 5.021 | 22.279 | 4.433 |
| 2/28/2006 0:00 | 29.087 | 40.168 | 34.912 | 43.847 | | 5.057 | 22.206 | 4.43 |
| 2/28/2006 4:00 | 29.097 | 40.189 | 34.926 | 43.854 | | 5.075 | 22.204 | 4.432 |
| 2/28/2006 8:00 | 29.1 | 40.196 | 34.936 | 43.856 | | 5.075 | 22.225 | 4.435 |
| 2/28/2006 12:00 | 29.102 | 40.193 | 34.928 | 43.858 | | 5.059 | 22.428 | 4.431 |
| 2/28/2006 16:00 | 29.09 | 40.151 | 34.902 | 43.847 | | 5.03 | 22.506 | 4.427 |
| 2/28/2006 20:00 | 29.092 | 40.144 | 34.906 | 43.84 | | 5.083 | 22.417 | 4.433 |
| 3/1/2006 0:00 | 29.097 | 40.149 | 34.91 | 43.81 | | 5.085 | 22.304 | 4.433 |
| 3/1/2006 4:00 | 29.082 | 40.116 | 34.89 | 43.829 | | 5.05 | 22.31 | 4.429 |
| 3/1/2006 8:00 | 29.078 | 40.108 | 34.89 | 43.819 | | 5.056 | 22.306 | 4.43 |
| 3/1/2006 12:00 | 29.105 | 40.168 | 34.932 | 43.801 | | 5.034 | 22.446 | 4.438 |
| 3/1/2006 16:00 | 29.117 | 40.204 | 34.952 | 43.84 | | 5.065 | 22.643 | 4.445 |
| 3/1/2006 20:00 | 29.164 | 40.339 | 35.045 | 43.889 | | 5.073 | 22.329 | 4.463 |
| 3/2/2006 0:00 | 29.207 | 40.443 | 35.093 | 43.93 | | 5.102 | 22.238 | 4.462 |
| 3/2/2006 4:00 | 29.224 | 40.477 | 35.105 | 43.958 | | 5.083 | 22.217 | 4.464 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 3/2/2006 8:00 | 29.239 | 40.509 | 35.131 | 43.983 | | 5.094 | 22.173 | 4.472 |
| 3/2/2006 12:00 | 29.264 | 40.573 | 35.164 | 44.02 | | 5.091 | 22.448 | 4.474 |
| 3/2/2006 16:00 | 29.266 | 40.56 | 35.156 | 44.011 | | 5.079 | 22.583 | 4.472 |
| 3/2/2006 20:00 | 29.276 | 40.584 | 35.178 | 44.032 | | 5.127 | 22.369 | 4.476 |
| 3/3/2006 0:00 | 29.293 | 40.616 | 35.198 | 44.087 | | 5.1 | 22.305 | 4.477 |
| 3/3/2006 4:00 | 29.303 | 40.641 | 35.218 | 44.078 | | 5.112 | 22.268 | 4.481 |
| 3/3/2006 8:00 | 29.301 | 40.655 | 35.23 | 44.126 | | 5.11 | 22.223 | 4.483 |
| 3/3/2006 12:00 | 29.326 | 40.665 | 35.232 | 44.145 | | 5.124 | 22.44 | 4.482 |
| 3/3/2006 16:00 | 29.311 | 40.612 | 35.196 | 44.143 | | 5.11 | 22.682 | 4.475 |
| 3/3/2006 20:00 | 29.298 | 40.586 | 35.198 | 44.14 | | 5.112 | 22.554 | 4.481 |
| 3/4/2006 0:00 | 29.298 | 40.584 | 35.198 | 44.14 | | 5.089 | 22.436 | 4.478 |
| 3/4/2006 4:00 | 29.296 | 40.582 | 35.206 | 44.117 | | 5.094 | 22.409 | 4.481 |
| 3/4/2006 8:00 | 29.298 | 40.597 | 35.22 | 44.124 | | 5.115 | 22.382 | 4.483 |
| 3/4/2006 12:00 | 29.289 | 40.569 | 35.205 | 44.117 | | 5.129 | 22.461 | 4.477 |
| 3/4/2006 16:00 | 29.269 | 40.507 | 35.166 | 44.133 | | 5.098 | 22.612 | 4.474 |
| 3/4/2006 20:00 | 29.261 | 40.465 | 35.158 | 44.085 | | 5.094 | 22.642 | 4.474 |
| 3/5/2006 0:00 | 29.261 | 40.462 | 35.166 | 44.113 | | 5.096 | 22.624 | 4.474 |
| 3/5/2006 4:00 | 29.239 | 40.413 | 35.133 | 44.09 | | 5.09 | 22.696 | 4.464 |
| 3/5/2006 8:00 | 29.241 | 40.42 | 35.164 | 44.062 | | 5.086 | 22.628 | 4.475 |
| 3/5/2006 12:00 | 29.254 | 40.428 | 35.196 | 44.099 | | 5.082 | 22.721 | 4.483 |
| 3/5/2006 16:00 | 29.261 | 40.43 | 35.212 | 44.09 | | 5.057 | 22.643 | 4.486 |
| 3/5/2006 20:00 | 29.274 | 40.471 | 35.246 | 44.143 | | 5.108 | 22.46 | 4.488 |
| 3/6/2006 0:00 | 29.289 | 40.49 | 35.258 | 44.129 | | 5.078 | 22.349 | 4.488 |
| 3/6/2006 4:00 | 29.279 | 40.469 | 35.252 | 44.161 | | 5.102 | 22.31 | 4.489 |
| 3/6/2006 8:00 | 29.289 | 40.501 | 35.278 | 44.173 | | 5.094 | 22.295 | 4.494 |
| 3/6/2006 12:00 | 29.31 | 40.531 | 35.294 | 44.189 | | 5.094 | 22.518 | 4.493 |
| 3/6/2006 16:00 | 29.296 | 40.488 | 35.264 | 44.159 | | 5.073 | 22.765 | 4.487 |
| 3/6/2006 20:00 | 29.291 | 40.479 | 35.274 | 44.191 | | 5.1 | 22.5 | 4.491 |
| 3/7/2006 0:00 | 29.293 | 40.477 | 35.28 | 44.201 | | 5.086 | 22.406 | 4.491 |
| 3/7/2006 4:00 | 29.279 | 40.445 | 35.258 | 44.187 | | 5.076 | 22.394 | 4.486 |
| 3/7/2006 8:00 | 29.261 | 40.407 | 35.236 | 44.145 | | 5.076 | 22.436 | 4.479 |
| 3/7/2006 12:00 | 29.224 | 40.304 | 35.172 | 44.108 | | 5.084 | 22.676 | 4.466 |
| 3/7/2006 16:00 | 29.197 | 40.251 | 35.139 | 44.08 | | 5.069 | 22.698 | 4.459 |
| 3/7/2006 20:00 | 29.202 | 40.255 | 35.162 | 44.094 | | 5.071 | 22.645 | 4.47 |
| 3/8/2006 0:00 | 29.209 | 40.279 | 35.174 | 44.064 | | 5.08 | 22.521 | 4.467 |
| 3/8/2006 4:00 | 29.194 | 40.247 | 35.151 | 44.064 | | 5.064 | 22.543 | 4.461 |
| 3/8/2006 8:00 | 29.179 | 40.204 | 35.133 | 44.062 | | 5.073 | 22.683 | 4.455 |
| 3/8/2006 12:00 | 29.154 | 40.157 | 35.121 | 44.018 | | 5.076 | 22.68 | 4.452 |
| 3/8/2006 16:00 | 29.122 | 40.05 | 35.073 | 44.016 | | 5.13 | 22.671 | 4.445 |
| 3/8/2006 20:00 | 29.157 | 40.138 | 35.156 | 44.004 | | 5.105 | 22.37 | 4.461 |
| 3/9/2006 0:00 | 29.172 | 40.183 | 35.18 | 44.041 | | 5.084 | 22.28 | 4.457 |
| 3/9/2006 4:00 | 29.15 | 40.138 | 35.151 | 44.034 | | 5.076 | 22.317 | 4.453 |
| 3/9/2006 8:00 | 29.162 | 40.161 | 35.167 | 44.034 | | 5.072 | 22.313 | 4.45 |
| 3/9/2006 12:00 | 29.162 | 40.153 | 35.172 | 44.039 | | 5.084 | 22.35 | 4.456 |
| 3/9/2006 16:00 | 29.137 | 40.106 | 35.145 | 43.999 | | 5.084 | 22.475 | 4.451 |
| 3/9/2006 20:00 | 29.177 | 40.18 | 35.205 | 44.018 | | 5.093 | 22.34 | 4.465 |
| 3/10/2006 0:00 | 29.204 | 40.249 | 35.244 | 44.08 | | 5.09 | 22.338 | 4.467 |
| 3/10/2006 4:00 | 29.207 | 40.275 | 35.258 | 44.064 | | 5.078 | 22.324 | 4.469 |
| 3/10/2006 8:00 | 29.236 | 40.317 | 35.286 | 44.113 | | 5.084 | 22.371 | 4.474 |
| 3/10/2006 12:00 | 29.249 | 40.343 | 35.294 | 44.133 | | 5.113 | 22.57 | 4.469 |
| 3/10/2006 16:00 | 29.224 | 40.289 | 35.262 | 44.134 | | 5.111 | 22.725 | 4.467 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 3/10/2006 20:00 | 29.246 | 40.294 | 35.28 | 44.111 | | 5.138 | 22.621 | 4.469 |
| 3/11/2006 0:00 | 29.249 | 40.306 | 35.286 | 44.15 | | 5.103 | 22.475 | 4.469 |
| 3/11/2006 4:00 | 29.241 | 40.272 | 35.266 | 44.117 | | 5.109 | 22.479 | 4.465 |
| 3/11/2006 8:00 | 29.266 | 40.332 | 35.318 | 44.163 | | 5.099 | 22.443 | 4.478 |
| 3/11/2006 12:00 | 29.303 | 40.433 | 35.372 | 44.196 | | 5.126 | 22.522 | 4.485 |
| 3/11/2006 16:00 | 29.311 | 40.456 | 35.372 | 44.187 | | 5.126 | 22.681 | 4.482 |
| 3/11/2006 20:00 | 29.331 | 40.503 | 35.402 | 44.235 | | 5.122 | 22.526 | 4.491 |
| 3/12/2006 0:00 | 29.348 | 40.544 | 35.413 | 44.231 | | 5.099 | 22.402 | 4.489 |
| 3/12/2006 4:00 | 29.341 | 40.52 | 35.404 | 44.238 | | 5.124 | 22.398 | 4.484 |
| 3/12/2006 8:00 | 29.326 | 40.473 | 35.364 | 44.263 | | 5.128 | 22.443 | 4.475 |
| 3/12/2006 12:00 | 29.286 | 40.375 | 35.31 | 44.21 | | 5.132 | 22.675 | 4.469 |
| 3/12/2006 16:00 | 29.262 | 40.289 | 35.27 | 44.208 | | 5.109 | 22.766 | 4.462 |
| 3/12/2006 20:00 | 29.239 | 40.251 | 35.264 | 44.191 | | 5.078 | 22.754 | 4.463 |
| 3/13/2006 0:00 | 29.262 | 40.304 | 35.306 | 44.161 | | 5.112 | 22.648 | 4.469 |
| 3/13/2006 4:00 | 29.274 | 40.356 | 35.342 | 44.205 | | 5.081 | 22.543 | 4.475 |
| 3/13/2006 8:00 | 29.311 | 40.465 | 35.411 | 44.242 | | 5.085 | 22.433 | 4.487 |
| 3/13/2006 12:00 | 29.363 | 40.582 | 35.463 | 44.279 | | 5.149 | 22.46 | 4.495 |
| 3/13/2006 16:00 | 29.381 | 40.618 | 35.477 | 44.316 | | 5.167 | 22.654 | 4.494 |
| 3/13/2006 20:00 | 29.403 | 40.663 | 35.503 | 44.341 | | 5.142 | 22.427 | 4.5 |
| 3/14/2006 0:00 | 29.428 | 40.71 | 35.523 | 44.372 | | 5.131 | 22.458 | 4.501 |
| 3/14/2006 4:00 | 29.42 | 40.704 | 35.517 | 44.362 | | 5.111 | 22.481 | 4.497 |
| 3/14/2006 8:00 | 29.438 | 40.719 | 35.535 | 44.406 | | 5.101 | 22.487 | 4.502 |
| 3/14/2006 12:00 | 29.45 | 40.723 | 35.527 | 44.422 | | 5.107 | 22.726 | 4.5 |
| 3/14/2006 16:00 | 29.42 | 40.657 | 35.489 | 44.415 | | 5.102 | 22.853 | 4.493 |
| 3/14/2006 20:00 | 29.423 | 40.676 | 35.517 | 44.42 | | 5.085 | 22.683 | 4.503 |
| 3/15/2006 0:00 | 29.44 | 40.716 | 35.545 | 44.434 | | 5.161 | 22.512 | 4.503 |
| 3/15/2006 4:00 | 29.445 | 40.71 | 35.539 | 44.439 | | 5.143 | 22.538 | 4.5 |
| 3/15/2006 8:00 | 29.443 | 40.702 | 35.537 | 44.443 | | 5.128 | 22.501 | 4.501 |
| 3/15/2006 12:00 | 29.42 | 40.648 | 35.489 | 44.422 | | 5.163 | 22.826 | 4.492 |
| 3/15/2006 16:00 | 29.371 | 40.518 | 35.421 | 44.388 | | 5.12 | 22.857 | 4.481 |
| 3/15/2006 20:00 | 29.353 | 40.482 | 35.423 | 44.358 | | 5.137 | 22.788 | 4.484 |
| 3/16/2006 0:00 | 29.356 | 40.482 | 35.415 | 44.346 | | 5.114 | 22.683 | 4.477 |
| 3/16/2006 4:00 | 29.339 | 40.441 | 35.398 | 44.298 | | 5.141 | 22.673 | 4.475 |
| 3/16/2006 8:00 | 29.383 | 40.563 | 35.495 | 44.353 | | 5.135 | 22.555 | 4.496 |
| 3/16/2006 12:00 | 29.43 | 40.704 | 35.569 | 44.402 | | 5.12 | 22.582 | 4.507 |
| 3/16/2006 16:00 | 29.46 | 40.761 | 35.589 | 44.434 | | 5.137 | 22.702 | 4.509 |
| 3/16/2006 20:00 | 29.487 | 40.821 | 35.62 | 44.464 | | 5.123 | 22.544 | 4.515 |
| 3/17/2006 0:00 | 29.505 | 40.855 | 35.634 | 44.464 | | 5.121 | 22.596 | 4.517 |
| 3/17/2006 4:00 | 29.492 | 40.868 | 35.64 | 44.485 | | 5.145 | 22.53 | 4.517 |
| 3/17/2006 8:00 | 29.512 | 40.874 | 35.652 | 44.531 | | 5.141 | 22.542 | 4.52 |
| 3/17/2006 12:00 | 29.534 | 40.904 | 35.662 | 44.547 | | 5.147 | 22.561 | 4.52 |
| 3/17/2006 16:00 | 29.51 | 40.832 | 35.614 | 44.543 | | 5.143 | 22.786 | 4.513 |
| 3/17/2006 20:00 | 29.492 | 40.808 | 35.613 | 44.508 | | 5.15 | 22.815 | 4.513 |
| 3/18/2006 0:00 | 29.507 | 40.823 | 35.632 | 44.538 | | 5.133 | 22.722 | 4.52 |
| 3/18/2006 4:00 | 29.502 | 40.815 | 35.62 | 44.536 | | 5.156 | 22.733 | 4.514 |
| 3/18/2006 8:00 | 29.507 | 40.825 | 35.644 | 44.54 | | 5.129 | 22.693 | 4.519 |
| 3/18/2006 12:00 | 29.507 | 40.821 | 35.634 | 44.547 | | 5.147 | 22.764 | 4.52 |
| 3/18/2006 16:00 | 29.495 | 40.778 | 35.609 | 44.533 | | 5.176 | 22.898 | 4.514 |
| 3/18/2006 20:00 | 29.492 | 40.769 | 35.611 | 44.526 | | 5.166 | 22.894 | 4.515 |
| 3/19/2006 0:00 | 29.495 | 40.781 | 35.628 | 44.526 | | 5.139 | 22.855 | 4.52 |
| 3/19/2006 4:00 | 29.502 | 40.783 | 35.622 | 44.501 | | 5.1 | 22.826 | 4.514 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 3/19/2006 8:00 | 29.49 | 40.774 | 35.628 | 44.526 | | 5.123 | 22.782 | 4.516 |
| 3/19/2006 12:00 | 29.5 | 40.785 | 35.634 | 44.496 | | 5.125 | 22.849 | 4.516 |
| 3/19/2006 16:00 | 29.49 | 40.748 | 35.611 | 44.517 | | 5.119 | 22.94 | 4.514 |
| 3/19/2006 20:00 | 29.47 | 40.734 | 35.622 | 44.513 | | 5.138 | 22.838 | 4.517 |
| 3/20/2006 0:00 | 29.45 | 40.702 | 35.618 | 44.513 | | 5.147 | 22.776 | 4.51 |
| 3/20/2006 4:00 | 29.406 | 40.616 | 35.597 | 44.466 | | 5.142 | 22.782 | 4.508 |
| 3/20/2006 8:00 | 29.363 | 40.548 | 35.573 | 44.489 | | 5.103 | 22.747 | 4.505 |
| 3/20/2006 12:00 | 29.304 | 40.439 | 35.527 | 44.469 | | 6.689 | 22.807 | 4.492 |
| 3/20/2006 16:00 | 29.242 | 40.341 | 35.525 | 44.42 | | 5.479 | 22.704 | 4.569 |
| 3/20/2006 20:00 | 29.195 | 40.3 | 35.541 | 44.453 | | 5.336 | 22.501 | 4.496 |
| 3/21/2006 0:00 | 29.152 | 40.266 | 35.521 | 44.459 | | 5.289 | 22.412 | 4.476 |
| 3/21/2006 4:00 | 29.12 | 40.227 | 35.523 | 44.473 | | 5.248 | 22.389 | 4.466 |
| 3/21/2006 8:00 | 29.12 | 40.262 | 35.581 | 44.503 | | 5.246 | 22.283 | 4.46 |
| 3/21/2006 12:00 | 29.118 | | 35.626 | 44.538 | | 5.238 | 22.232 | 4.448 |
| 3/21/2006 16:00 | 29.091 | 39.893 | 35.646 | | | 5.219 | 22.194 | 4.431 |
| 3/21/2006 20:00 | 29.039 | 39.598 | 35.632 | 44.865 | | 5.157 | 22.05 | 4.417 |
| 3/22/2006 0:00 | 28.992 | 39.474 | 35.614 | 44.809 | | 5.153 | 22.012 | 4.402 |
| 3/22/2006 4:00 | 28.967 | 39.427 | 35.62 | 44.779 | | 5.17 | 22.031 | 4.391 |
| 3/22/2006 8:00 | 28.945 | 39.378 | 35.642 | 44.751 | | 5.12 | 22.064 | 4.38 |
| 3/22/2006 12:00 | 28.936 | 39.335 | 35.656 | 44.697 | | 5.139 | 22.608 | 4.365 |
| 3/22/2006 16:00 | | 39.265 | 35.628 | 44.67 | | 4.898 | 22.615 | 4.345 |
| 3/22/2006 20:00 | 28.88 | 39.203 | 35.616 | 44.66 | | 4.782 | 22.342 | 4.334 |
| 3/23/2006 0:00 | 28.756 | 39.162 | 35.605 | 44.665 | | 4.857 | 22.219 | 4.325 |
| 3/23/2006 4:00 | 28.7 | 39.1 | 35.597 | 44.624 | | 4.931 | 22.207 | 4.308 |
| 3/23/2006 8:00 | 28.652 | 39.06 | 35.609 | 44.612 | | 4.985 | 22.182 | 4.296 |
| 3/23/2006 12:00 | 28.641 | 39.028 | 35.689 | 44.603 | | 5.049 | 22.302 | 4.279 |
| 3/23/2006 16:00 | 28.604 | 38.96 | 35.607 | 44.628 | | 5.046 | 22.49 | 4.251 |
| 3/23/2006 20:00 | 28.537 | 38.9 | 35.593 | 44.612 | | 5.042 | 22.319 | 4.197 |
| 3/24/2006 0:00 | 28.5 | 38.857 | 35.575 | 44.6 | | 5.039 | 22.18 | 4.138 |
| 3/24/2006 4:00 | 28.458 | 38.791 | 35.547 | 44.559 | | 5.016 | 22.149 | 4.093 |
| 3/24/2006 8:00 | 28.426 | 38.759 | 35.541 | 44.543 | | 5.075 | 22.124 | 4.06 |
| 3/24/2006 12:00 | 28.409 | 38.744 | 35.539 | 44.573 | | 5.074 | 22.267 | 4.035 |
| 3/24/2006 16:00 | 28.381 | 38.673 | 35.503 | 44.529 | | 5.08 | 22.383 | 3.983 |
| 3/24/2006 20:00 | 28.374 | 38.659 | 35.505 | 44.559 | | 5.09 | 22.248 | 3.903 |
| 3/25/2006 0:00 | 28.364 | 38.65 | 35.507 | 44.531 | | 5.092 | 22.13 | 3.862 |
| 3/25/2006 4:00 | 28.349 | 38.624 | 35.495 | 44.554 | | 5.096 | 22.093 | 3.84 |
| 3/25/2006 8:00 | 28.357 | 38.637 | 35.505 | 44.556 | | 5.119 | 22.041 | 3.832 |
| 3/25/2006 12:00 | 28.334 | 38.629 | 35.493 | 44.563 | | 5.105 | 22.197 | 3.824 |
| 3/25/2006 16:00 | 28.312 | 38.569 | 35.454 | 44.552 | | 5.109 | 22.408 | 3.763 |
| 3/25/2006 20:00 | 28.302 | 38.515 | 35.43 | 44.508 | | 5.125 | 22.261 | 3.698 |
| 3/26/2006 0:00 | 28.29 | 38.509 | 35.428 | 44.536 | | 5.109 | 22.046 | 3.698 |
| 3/26/2006 4:00 | 28.27 | 38.46 | 35.396 | 44.522 | | 5.111 | 22.013 | 3.695 |
| 3/26/2006 8:00 | 28.26 | 38.441 | 35.386 | 44.515 | | 5.099 | 21.994 | 3.701 |
| 3/26/2006 12:00 | 28.235 | 38.39 | 35.348 | 44.496 | | 5.101 | 22.263 | 3.692 |
| 3/26/2006 16:00 | 28.186 | 38.294 | 35.294 | 44.439 | | 5.111 | 22.296 | 3.639 |
| 3/26/2006 20:00 | 28.178 | 38.285 | 35.304 | 44.448 | | 5.097 | 22.186 | 3.635 |
| 3/27/2006 0:00 | 28.185 | 38.319 | 35.292 | 44.446 | | 5.115 | 22.083 | 3.644 |
| 3/27/2006 4:00 | 28.166 | 38.289 | 35.252 | 44.436 | | 5.088 | 22.077 | 3.643 |
| 3/27/2006 8:00 | 28.156 | 38.268 | 35.232 | 44.395 | | 5.097 | 22.023 | 3.652 |
| 3/27/2006 12:00 | 28.175 | 38.289 | 35.235 | 44.418 | | 5.089 | 22.097 | 3.667 |
| 3/27/2006 16:00 | 28.198 | 38.336 | 35.247 | 44.402 | | 5.11 | 22.058 | 3.674 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 3/27/2006 20:00 | 28.235 | 38.406 | 35.266 | 44.427 | | 5.121 | 21.944 | 3.694 |
| 3/28/2006 0:00 | 28.262 | 38.454 | 35.266 | 44.483 | | 5.114 | 21.897 | 3.709 |
| 3/28/2006 4:00 | 28.275 | 38.46 | 35.251 | 44.464 | | 5.097 | 21.895 | 3.722 |
| 3/28/2006 8:00 | 28.295 | 38.49 | 35.26 | 44.48 | | 5.097 | 21.882 | 3.738 |
| 3/28/2006 12:00 | 28.322 | 38.517 | 35.253 | 44.526 | | 5.103 | 21.975 | 3.749 |
| 3/28/2006 16:00 | 28.31 | 38.469 | 35.213 | 44.494 | | 5.143 | 22.236 | 3.755 |
| 3/28/2006 20:00 | 28.305 | 38.441 | 35.197 | 44.487 | | 5.114 | 22.168 | 3.768 |
| 3/29/2006 0:00 | 28.317 | 38.441 | 35.193 | 44.487 | | 5.1 | 22 | 3.777 |
| 3/29/2006 4:00 | 28.31 | 38.409 | 35.169 | 44.478 | | 5.11 | 21.983 | 3.788 |
| 3/29/2006 8:00 | 28.31 | 38.4 | 35.161 | 44.501 | | 5.122 | 21.969 | 3.799 |
| 3/29/2006 12:00 | 28.297 | 38.375 | 35.131 | 44.487 | | 5.095 | 22.257 | 3.803 |
| 3/29/2006 16:00 | 28.27 | 38.287 | 35.077 | 44.462 | | 5.093 | 22.348 | 3.807 |
| 3/29/2006 20:00 | 28.26 | 38.246 | 35.059 | 44.439 | | 5.103 | 22.25 | 3.815 |
| 3/30/2006 0:00 | 28.28 | 38.259 | 35.063 | 44.402 | | 5.102 | 22.095 | 3.825 |
| 3/30/2006 4:00 | 28.255 | 38.212 | 35.026 | 44.386 | | 5.118 | 22.126 | 3.824 |
| 3/30/2006 8:00 | 28.255 | 38.198 | 35.019 | 44.404 | | 5.116 | 22.159 | 3.837 |
| 3/30/2006 12:00 | 28.247 | 38.172 | 34.992 | 44.388 | | 5.122 | 22.327 | 3.84 |
| 3/30/2006 16:00 | 28.191 | 38.063 | 34.93 | 44.328 | | 5.04 | 22.306 | 3.828 |
| 3/30/2006 20:00 | 28.121 | 37.986 | 34.93 | 44.337 | | 4.376 | 22.013 | 3.787 |
| 3/31/2006 0:00 | 28.089 | 38.037 | 34.986 | 44.337 | | 4.539 | 21.681 | 3.753 |
| 3/31/2006 4:00 | 28.044 | 38.04 | 34.97 | 44.388 | | 4.762 | 21.595 | 3.719 |
| 3/31/2006 8:00 | 28.022 | 38.057 | 34.966 | 44.413 | | 4.907 | 21.567 | 3.7 |
| 3/31/2006 12:00 | 28.02 | 38.061 | 34.944 | 44.431 | | 4.977 | 21.696 | 3.688 |
| 3/31/2006 16:00 | 27.997 | 38.029 | 34.918 | 44.448 | | 5.01 | 21.927 | 3.679 |
| 3/31/2006 20:00 | 27.965 | 38.033 | 34.92 | 44.469 | | 5.04 | 21.795 | 3.678 |
| 4/1/2006 0:00 | 28.003 | 38.042 | 34.914 | 44.487 | | 5.063 | 21.65 | 3.676 |
| 4/1/2006 4:00 | 27.985 | 38.01 | 34.88 | 44.466 | | 5.059 | 21.629 | 3.671 |
| 4/1/2006 8:00 | 27.988 | 37.995 | 34.87 | 44.501 | | 5.067 | 21.658 | 3.674 |
| 4/1/2006 12:00 | 27.973 | 37.958 | 34.835 | 44.506 | | 5.057 | 21.996 | 3.668 |
| 4/1/2006 16:00 | 27.923 | 37.839 | 34.757 | 44.485 | | 5.065 | 22.12 | 3.657 |
| 4/1/2006 20:00 | 27.883 | 37.786 | 34.719 | 44.42 | | 5.049 | 22.039 | 3.658 |
| 4/2/2006 0:00 | 27.854 | 37.717 | 34.685 | 44.425 | | 5.053 | 21.946 | 3.654 |
| 4/2/2006 4:00 | 27.702 | 37.527 | 34.616 | 44.395 | | 3.347 | 21.722 | 3.393 |
| 4/2/2006 8:00 | 27.388 | 37.311 | 34.524 | 44.362 | | 3.678 | 21.317 | 3.226 |
| 4/2/2006 12:00 | 27.2 | 37.169 | 34.472 | 44.339 | | 4.093 | 21.304 | 3.11 |
| 4/2/2006 16:00 | 27.096 | 37.13 | 34.425 | 44.344 | | 4.377 | 21.07 | 3.018 |
| 4/2/2006 20:00 | 26.996 | 37.075 | 34.344 | 44.358 | | 4.383 | 20.908 | 2.941 |
| 4/3/2006 0:00 | 26.756 | 37.03 | 34.288 | 44.358 | | 3.186 | 20.39 | 2.58 |
| 4/3/2006 4:00 | 26.555 | 36.932 | 34.158 | 44.411 | | 3.693 | 20.015 | 2.328 |
| 4/3/2006 8:00 | 26.392 | 36.844 | 34.063 | 44.434 | | 4.122 | 19.975 | 2.191 |
| 4/3/2006 12:00 | 26.295 | 36.739 | 33.958 | 44.448 | | 4.373 | 20.062 | 2.115 |
| 4/3/2006 16:00 | 26.173 | 36.588 | 33.823 | 44.411 | | 4.561 | 20.283 | 2.052 |
| 4/3/2006 20:00 | 26.077 | 36.45 | 33.701 | 44.416 | | 4.684 | 20.152 | 2.017 |
| 4/4/2006 0:00 | 26.017 | 36.353 | 33.578 | 44.408 | | 4.775 | 19.959 | 2 |
| 4/4/2006 4:00 | 25.945 | 36.229 | 33.423 | 44.383 | | 4.837 | 19.845 | 1.985 |
| 4/4/2006 8:00 | 25.9 | 36.153 | 33.322 | 44.365 | | 4.86 | 19.794 | 1.985 |
| 4/4/2006 12:00 | 25.851 | 36.054 | 33.198 | 44.342 | | 4.883 | 20.126 | 1.976 |
| 4/4/2006 16:00 | 25.781 | 35.905 | 33.051 | 44.272 | | 4.903 | 20.318 | 1.963 |
| 4/4/2006 20:00 | 25.674 | 35.798 | 32.978 | 44.261 | | 4.917 | 20.174 | 1.966 |
| 4/5/2006 0:00 | 25.717 | 35.73 | 32.886 | 44.203 | | 4.914 | 19.994 | 1.972 |
| 4/5/2006 4:00 | 25.687 | 35.658 | 32.789 | 44.196 | | 4.934 | 19.936 | 1.979 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 4/5/2006 8:00 | 25.672 | 35.598 | 32.729 | 44.166 | | 4.945 | 19.936 | 1.988 |
| 4/5/2006 12:00 | 25.625 | 35.506 | 32.643 | 44.099 | | 4.934 | 20.193 | 1.983 |
| 4/5/2006 16:00 | 25.572 | 35.383 | 32.537 | 44.053 | | 4.93 | 20.248 | 1.987 |
| 4/5/2006 20:00 | 25.553 | 35.319 | 32.454 | 44.037 | | 4.916 | 20.056 | 1.995 |
| 4/6/2006 0:00 | 25.548 | 35.288 | 32.365 | 44.004 | | 4.926 | 19.933 | 2.008 |
| 4/6/2006 4:00 | 25.518 | 35.227 | 32.242 | 43.962 | | 4.942 | 19.964 | 2.011 |
| 4/6/2006 8:00 | 25.51 | 35.199 | 32.133 | 43.928 | | 4.939 | 19.985 | 2.026 |
| 4/6/2006 12:00 | 25.51 | 35.182 | 32.037 | 43.9 | | 4.939 | 20.126 | 2.038 |
| 4/6/2006 16:00 | 25.468 | 35.109 | 31.892 | 43.854 | | 4.935 | 20.062 | 2.038 |
| 4/6/2006 20:00 | 25.485 | 35.092 | 31.828 | 43.817 | | 4.939 | 19.874 | 2.062 |
| 4/7/2006 0:00 | 25.476 | 35.06 | 31.763 | 43.769 | | 4.931 | 19.638 | 2.068 |
| 4/7/2006 4:00 | 25.493 | 35.069 | 31.759 | 43.743 | | 4.926 | 19.557 | 2.092 |
| 4/7/2006 8:00 | 25.518 | 35.066 | 31.755 | 43.746 | | 4.937 | 19.57 | 2.112 |
| 4/7/2006 12:00 | 25.595 | 35.158 | 31.856 | 43.771 | | 4.955 | 19.711 | 2.155 |
| 4/7/2006 16:00 | 25.666 | 35.214 | 31.914 | 43.792 | | 4.955 | 19.94 | 2.188 |
| 4/7/2006 20:00 | 25.821 | 35.368 | 32.129 | 43.847 | | 4.982 | 19.823 | 2.253 |
| 4/8/2006 0:00 | 25.887 | 35.419 | 32.199 | 43.884 | | 4.984 | 19.972 | 2.282 |
| 4/8/2006 4:00 | 25.947 | 35.445 | 32.226 | 43.905 | | 5.007 | 19.907 | 2.309 |
| 4/8/2006 8:00 | 26.004 | 35.488 | 32.278 | 43.926 | | 4.978 | 19.914 | 2.341 |
| 4/8/2006 12:00 | 26.034 | 35.471 | 32.25 | 43.93 | | 4.999 | 20.22 | 2.355 |
| 4/8/2006 16:00 | 26.016 | 35.426 | 32.198 | 43.914 | | 5.003 | 20.458 | 2.368 |
| 4/8/2006 20:00 | 26.011 | 35.385 | 32.15 | 43.889 | | 4.999 | 20.313 | 2.385 |
| 4/9/2006 0:00 | 26.036 | 35.385 | 32.152 | 43.873 | | 5.024 | 20.049 | 2.41 |
| 4/9/2006 4:00 | 26.036 | 35.359 | 32.12 | 43.819 | | 5.036 | 19.97 | 2.425 |
| 4/9/2006 8:00 | 26.046 | 35.351 | 32.104 | 43.801 | | 5.044 | 19.918 | 2.448 |
| 4/9/2006 12:00 | 26.056 | 35.334 | 32.07 | 43.813 | | 5.007 | 20.231 | 2.46 |
| 4/9/2006 16:00 | 26.011 | 35.27 | 31.976 | 43.776 | | 5.024 | 20.388 | 2.469 |
| 4/9/2006 20:00 | 26.009 | 35.246 | 31.932 | 43.743 | | 5.014 | 20.216 | 2.489 |
| 4/10/2006 0:00 | 26.023 | 35.257 | 31.93 | 43.718 | | 5.016 | 20.018 | 2.509 |
| 4/10/2006 4:00 | 26.018 | 35.236 | 31.895 | 43.662 | | 5.01 | 19.974 | 2.519 |
| 4/10/2006 8:00 | 26.026 | 35.238 | 31.887 | 43.669 | | 5.004 | 19.982 | 2.54 |
| 4/10/2006 12:00 | 26.055 | 35.248 | 31.863 | 43.621 | | 5.003 | 20.28 | 2.555 |
| 4/10/2006 16:00 | 26.033 | 35.212 | 31.799 | 43.62 | | 5.026 | 20.423 | 2.567 |
| 4/10/2006 20:00 | 26.051 | 35.206 | 31.779 | 43.591 | | 5.022 | 20.189 | 2.588 |
| 4/11/2006 0:00 | 26.07 | 35.212 | 31.773 | 43.545 | | 5.026 | 20.02 | 2.603 |
| 4/11/2006 4:00 | 26.055 | 35.178 | 31.711 | 43.517 | | 5.018 | 19.976 | 2.612 |
| 4/11/2006 8:00 | 26.063 | 35.167 | 31.679 | 43.489 | | 5.043 | 19.962 | 2.628 |
| 4/11/2006 12:00 | 26.075 | 35.182 | 31.654 | 43.496 | | 5.033 | 20.133 | 2.643 |
| 4/11/2006 16:00 | 26.07 | 35.157 | 31.606 | 43.441 | | 5.032 | 20.38 | 2.656 |
| 4/11/2006 20:00 | 26.11 | 35.195 | 31.664 | 43.457 | | 5.022 | 20.212 | 2.692 |
| 4/12/2006 0:00 | 26.224 | 35.33 | 31.819 | 43.484 | | 5.033 | 19.957 | 2.724 |
| 4/12/2006 4:00 | 26.276 | 35.381 | 31.88 | 43.517 | | 5.033 | 19.976 | 2.733 |
| 4/12/2006 8:00 | 26.34 | 35.434 | 31.938 | 43.535 | | 5.043 | 20.067 | 2.759 |
| 4/12/2006 12:00 | 26.408 | 35.528 | 31.99 | 43.556 | | 5.062 | 20.359 | 2.784 |
| 4/12/2006 16:00 | 26.405 | 35.486 | 31.944 | 43.549 | | 5.058 | 20.557 | 2.804 |
| 4/12/2006 20:00 | 26.4 | 35.467 | 31.9 | 43.533 | | 5.05 | 20.408 | 2.824 |
| 4/13/2006 0:00 | 26.422 | 35.478 | 31.892 | 43.491 | | 5.07 | 20.125 | 2.844 |
| 4/13/2006 4:00 | 26.415 | 35.448 | 31.837 | 43.498 | | 5.054 | 20.057 | 2.856 |
| 4/13/2006 8:00 | 26.407 | 35.424 | 31.785 | 43.473 | | 5.052 | 20.04 | 2.869 |
| 4/13/2006 12:00 | 26.39 | 35.403 | 31.681 | 43.445 | | 5.066 | 20.421 | 2.875 |
| 4/13/2006 16:00 | 26.34 | 35.328 | 31.544 | 43.367 | | 5.05 | 20.512 | 2.887 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 4/13/2006 20:00 | 26.343 | 35.317 | 31.52 | 43.367 | | 5.05 | 20.34 | 2.913 |
| 4/14/2006 0:00 | 26.362 | 35.328 | 31.504 | 43.313 | | 5.037 | 20.057 | 2.926 |
| 4/14/2006 4:00 | 26.335 | 35.283 | 31.397 | 43.309 | | 5.033 | 20.036 | 2.928 |
| 4/14/2006 8:00 | 26.345 | 35.304 | 31.381 | 43.279 | | 5.052 | 20.028 | 2.948 |
| 4/14/2006 12:00 | 26.37 | 35.349 | 31.383 | 43.27 | | 5.047 | 20.357 | 2.964 |
| 4/14/2006 16:00 | 26.377 | 35.334 | 31.341 | 43.219 | | 5.043 | 20.559 | 2.981 |
| 4/14/2006 20:00 | 26.395 | 35.343 | 31.349 | 43.237 | | 5.06 | 20.288 | 3.007 |
| 4/15/2006 0:00 | 26.427 | 35.364 | 31.359 | 43.228 | | 5.06 | 20.018 | 3.019 |
| 4/15/2006 4:00 | 26.414 | 35.347 | 31.311 | 43.212 | | 5.06 | 19.935 | 3.027 |
| 4/15/2006 8:00 | 26.422 | 35.334 | 31.266 | 43.186 | | 5.077 | 19.982 | 3.036 |
| 4/15/2006 12:00 | 26.412 | 35.309 | 31.182 | 43.159 | | 5.097 | 20.222 | 3.045 |
| 4/15/2006 16:00 | 26.345 | 35.255 | 31.005 | 43.112 | | 5.085 | 20.423 | 3.039 |
| 4/15/2006 20:00 | 26.335 | 35.223 | 30.971 | 43.043 | | 5.055 | 20.255 | 3.066 |
| 4/16/2006 0:00 | 26.355 | 35.236 | 30.969 | 43.045 | | 5.077 | 20.115 | 3.076 |
| 4/16/2006 4:00 | 26.384 | 35.264 | 30.993 | 42.999 | | 5.05 | 20.044 | 3.088 |
| 4/16/2006 8:00 | 26.434 | 35.334 | 31.083 | 42.997 | | 5.067 | 20.02 | 3.108 |
| 4/16/2006 12:00 | 26.506 | 35.4 | 31.198 | 43.009 | | 5.079 | 20.063 | 3.128 |
| 4/16/2006 16:00 | 26.548 | 35.434 | 31.262 | 43.025 | | 5.057 | 20.173 | 3.147 |
| 4/16/2006 20:00 | 26.595 | 35.501 | 31.341 | 43.045 | | 5.102 | 20.097 | 3.167 |
| 4/17/2006 0:00 | 26.63 | 35.542 | 31.379 | 43.089 | | 5.067 | 20.046 | 3.179 |
| 4/17/2006 4:00 | 26.64 | 35.55 | 31.383 | 43.055 | | 5.065 | 20.061 | 3.191 |
| 4/17/2006 8:00 | 26.67 | 35.582 | 31.415 | 43.087 | | 5.053 | 20.086 | 3.208 |
| 4/17/2006 12:00 | 26.697 | 35.627 | 31.421 | 43.087 | | 5.083 | 20.21 | 3.217 |
| 4/17/2006 16:00 | 26.685 | 35.603 | 31.363 | 43.071 | | 5.065 | 20.471 | 3.225 |
| 4/17/2006 20:00 | 26.679 | 35.603 | 31.33 | 43.045 | | 5.069 | 20.427 | 3.244 |
| 4/18/2006 0:00 | 26.672 | 35.591 | 31.294 | 42.997 | | 5.076 | 20.286 | 3.249 |
| 4/18/2006 4:00 | 26.657 | 35.533 | 31.208 | 43.002 | | 5.059 | 20.243 | 3.253 |
| 4/18/2006 8:00 | 26.602 | 35.495 | 31.15 | 42.974 | | 5.037 | 20.257 | 3.262 |
| 4/18/2006 12:00 | 26.657 | 35.518 | 31.15 | 42.932 | | 5.043 | 20.491 | 3.274 |
| 4/18/2006 16:00 | 26.699 | 35.571 | 31.214 | 42.935 | | 5.063 | 20.739 | 3.299 |
| 4/18/2006 20:00 | 26.754 | 35.704 | 31.32 | 42.976 | | 5.096 | 20.467 | 3.323 |
| 4/19/2006 0:00 | 26.826 | 35.832 | 31.447 | 43.009 | | 5.098 | 20.19 | 3.338 |
| 4/19/2006 4:00 | 26.848 | 35.866 | 31.465 | 43.02 | | 5.111 | 20.279 | 3.35 |
| 4/19/2006 8:00 | 26.863 | 35.883 | 31.477 | 43.022 | | 5.1 | 20.21 | 3.361 |
| 4/19/2006 12:00 | 26.856 | 35.895 | 31.459 | 43.022 | | 5.115 | 20.547 | 3.377 |
| 4/19/2006 16:00 | 26.865 | 35.872 | 31.377 | 42.972 | | 5.125 | 20.732 | 3.393 |
| 4/19/2006 20:00 | 26.858 | 35.846 | 31.357 | 42.979 | | 5.111 | 20.574 | 3.415 |
| 4/20/2006 0:00 | 26.885 | 35.887 | 31.401 | 42.953 | | 5.101 | 20.324 | 3.43 |
| 4/20/2006 4:00 | 26.903 | 35.91 | 31.409 | 42.946 | | 5.097 | 20.31 | 3.439 |
| 4/20/2006 8:00 | 26.908 | 35.966 | 31.457 | 42.981 | | 5.124 | 20.266 | 3.454 |
| 4/20/2006 12:00 | 26.95 | 35.968 | 31.439 | 42.983 | | 5.117 | 20.608 | 3.463 |
| 4/20/2006 16:00 | 26.942 | 35.947 | 31.387 | 42.972 | | 5.111 | 20.843 | 3.479 |
| 4/20/2006 20:00 | 26.955 | 35.97 | 31.399 | 42.958 | | 5.113 | 20.645 | 3.503 |
| 4/21/2006 0:00 | 26.96 | 35.981 | 31.395 | 42.923 | | 5.111 | 20.423 | 3.508 |
| 4/21/2006 4:00 | 26.97 | 35.983 | 31.377 | 42.914 | | 5.105 | 20.322 | 3.519 |
| 4/21/2006 8:00 | 26.985 | 36.03 | 31.397 | 42.942 | | 5.115 | 20.326 | 3.528 |
| 4/21/2006 12:00 | 27.004 | 36.042 | 31.393 | 42.942 | | 5.108 | 20.684 | 3.539 |
| 4/21/2006 16:00 | 26.992 | 36 | 31.32 | 42.923 | | 5.114 | 20.936 | 3.554 |
| 4/21/2006 20:00 | 26.992 | 36.002 | 31.294 | 42.877 | | 5.12 | 20.705 | 3.574 |
| 4/22/2006 0:00 | 27.002 | 36.044 | 31.324 | 42.872 | | 5.11 | 20.403 | 3.586 |
| 4/22/2006 4:00 | 27.017 | 36.057 | 31.318 | 42.865 | | 5.107 | 20.378 | 3.592 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 4/22/2006 8:00 | 27.036 | 36.094 | 31.345 | 42.898 | | 5.112 | 20.361 | 3.601 |
| 4/22/2006 12:00 | 27.057 | 36.106 | 31.332 | 42.893 | | 5.099 | 20.736 | 3.612 |
| 4/22/2006 16:00 | 27.052 | 36.14 | 31.286 | 42.879 | | 5.11 | 20.885 | 3.629 |
| 4/22/2006 20:00 | 27.066 | 36.172 | 31.274 | 42.868 | | 5.1 | 20.759 | 3.648 |
| 4/23/2006 0:00 | 27.071 | 36.164 | 31.288 | 42.865 | | 5.122 | 20.494 | 3.66 |
| 4/23/2006 4:00 | 27.083 | 36.168 | 31.288 | 42.836 | | 5.104 | 20.428 | 3.666 |
| 4/23/2006 8:00 | 27.104 | 36.192 | 31.31 | 42.856 | | 5.098 | 20.494 | 3.675 |
| 4/23/2006 12:00 | 27.099 | 36.179 | 31.27 | 42.845 | | 5.114 | 20.825 | 3.684 |
| 4/23/2006 16:00 | 27.076 | 36.132 | 31.208 | 42.826 | | 5.118 | 21.001 | 3.701 |
| 4/23/2006 20:00 | 27.091 | 36.187 | 31.208 | 42.814 | | 5.118 | 20.804 | 3.721 |
| 4/24/2006 0:00 | 27.061 | 36.168 | 31.212 | 42.808 | | 5.102 | 20.514 | 3.73 |
| 4/24/2006 4:00 | 27.098 | 36.162 | 31.198 | 42.805 | | 5.083 | 20.456 | 3.728 |
| 4/24/2006 8:00 | 27.148 | 36.251 | 31.326 | 42.814 | | 5.1 | 20.531 | 3.752 |
| 4/24/2006 12:00 | 27.118 | 36.179 | 31.226 | 42.803 | | 5.098 | 20.661 | 3.743 |
| 4/24/2006 16:00 | 27.103 | 36.147 | 31.156 | 42.784 | | 5.098 | 20.879 | 3.753 |
| 4/24/2006 20:00 | 27.106 | 36.147 | 31.16 | 42.766 | | 5.073 | 20.783 | 3.777 |
| 4/25/2006 0:00 | 27.126 | 36.19 | 31.212 | 42.736 | | 5.086 | 20.583 | 3.792 |
| 4/25/2006 4:00 | 27.165 | 36.258 | 31.282 | 42.75 | | 5.071 | 20.541 | 3.794 |
| 4/25/2006 8:00 | 27.203 | 36.326 | 31.35 | 42.796 | | 5.065 | 20.423 | 3.8 |
| 4/25/2006 12:00 | 27.232 | 36.377 | 31.413 | 42.821 | | 5.069 | 20.547 | 3.805 |
| 4/25/2006 16:00 | 27.25 | 36.392 | 31.427 | 42.829 | | 5.1 | 20.535 | 3.809 |
| 4/25/2006 20:00 | 27.232 | 36.394 | 31.425 | 42.796 | | 5.102 | 20.516 | 3.812 |
| 4/26/2006 0:00 | 27.275 | 36.424 | 31.457 | 42.833 | | 5.07 | 20.504 | 3.815 |
| 4/26/2006 4:00 | 27.272 | 36.418 | 31.441 | 42.833 | | 5.076 | 20.523 | 3.816 |
| 4/26/2006 8:00 | 27.287 | 36.439 | 31.465 | 42.801 | | 5.09 | 20.535 | 3.824 |
| 4/26/2006 12:00 | 27.292 | 36.446 | 31.449 | 42.829 | | 5.088 | 20.788 | 3.827 |
| 4/26/2006 16:00 | 27.267 | 36.405 | 31.371 | 42.806 | | 5.078 | 21.098 | 3.834 |
| 4/26/2006 20:00 | 27.252 | 36.365 | 31.324 | 42.748 | | 5.08 | 20.943 | 3.845 |
| 4/27/2006 0:00 | 27.275 | 36.407 | 31.361 | 42.775 | | 5.072 | 20.701 | 3.854 |
| 4/27/2006 4:00 | 27.26 | 36.405 | 31.35 | 42.771 | | 5.082 | 20.641 | 3.856 |
| 4/27/2006 8:00 | 27.284 | 36.42 | 31.36 | 42.762 | | 5.076 | 20.637 | 3.859 |
| 4/27/2006 12:00 | 27.292 | 36.429 | 31.35 | 42.759 | | 5.078 | 21.009 | 3.864 |
| 4/27/2006 16:00 | 27.255 | 36.345 | 31.238 | 42.702 | | 5.061 | 21.077 | 3.871 |
| 4/27/2006 20:00 | 27.25 | 36.341 | 31.226 | 42.715 | | 5.093 | 20.928 | 3.887 |
| 4/28/2006 0:00 | 27.267 | 36.38 | 31.252 | 42.706 | | 5.072 | 20.696 | 3.893 |
| 4/28/2006 4:00 | 27.284 | 36.399 | 31.262 | 42.702 | | 5.057 | 20.645 | 3.897 |
| 4/28/2006 8:00 | 27.287 | 36.424 | 31.278 | 42.699 | | 5.041 | 20.605 | 3.898 |
| 4/28/2006 12:00 | 27.26 | 36.384 | 31.224 | 42.687 | | 5.044 | 20.612 | 3.891 |
| 4/28/2006 16:00 | 27.235 | 36.36 | 31.224 | 42.674 | | 5.035 | 20.639 | 3.897 |
| 4/28/2006 20:00 | 27.217 | 36.335 | 31.21 | 42.637 | | 5.039 | 20.634 | 3.898 |
| 4/29/2006 0:00 | 27.18 | 36.301 | 31.204 | 42.662 | | 5.019 | 20.521 | 3.887 |
| 4/29/2006 4:00 | 27.054 | 36.102 | 31.087 | 42.635 | | 5.025 | 20.415 | 3.862 |
| 4/29/2006 8:00 | 26.915 | 35.938 | 30.985 | 42.611 | | 5.023 | 20.312 | 3.848 |
| 4/29/2006 12:00 | 26.801 | 35.831 | 30.932 | 42.563 | | 5.027 | 20.421 | 3.837 |
| 4/29/2006 16:00 | 26.717 | 35.748 | 30.9 | 42.577 | | 5.03 | 20.473 | 3.819 |
| 4/29/2006 20:00 | 26.62 | 35.652 | 30.868 | 42.556 | | 5.021 | 20.454 | 3.799 |
| 4/30/2006 0:00 | 26.535 | 35.556 | 30.84 | 42.535 | | 4.994 | 20.341 | 3.772 |
| 4/30/2006 4:00 | 26.26 | 35.362 | 30.765 | 42.505 | | 4.933 | 19.633 | 3.654 |
| 4/30/2006 8:00 | 25.903 | 35.276 | 30.763 | 42.496 | | 4.976 | 19.357 | 3.497 |
| 4/30/2006 12:00 | 25.665 | 35.223 | 30.765 | 42.498 | | 4.962 | 19.356 | 3.337 |
| 4/30/2006 16:00 | 25.521 | 35.178 | 30.769 | 42.47 | | 4.968 | 19.37 | 3.188 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 4/30/2006 20:00 | 25.424 | 35.131 | 30.771 | 42.505 | | 4.966 | 19.355 | 3.055 |
| 5/1/2006 0:00 | 25.387 | 35.125 | 30.812 | 42.524 | | 4.986 | 19.217 | 2.937 |
| 5/1/2006 4:00 | 25.338 | 35.088 | 30.787 | 42.501 | | 4.976 | 19.176 | 2.832 |
| 5/1/2006 8:00 | 25.325 | 35.076 | 30.79 | 42.542 | | 4.986 | 19.111 | 2.748 |
| 5/1/2006 12:00 | 25.315 | 35.056 | 30.769 | 42.542 | | 5.005 | 19.339 | 2.684 |
| 5/1/2006 16:00 | 25.29 | 35.016 | 30.689 | 42.531 | | 4.984 | 19.49 | 2.633 |
| 5/1/2006 20:00 | 25.275 | 34.996 | 30.634 | 42.521 | | 4.995 | 19.426 | 2.592 |
| 5/2/2006 0:00 | 25.238 | 34.977 | 30.582 | 42.517 | | 4.981 | 19.262 | 2.553 |
| 5/2/2006 4:00 | 25.233 | 34.93 | 30.465 | 42.491 | | 4.991 | 19.182 | 2.513 |
| 5/2/2006 8:00 | 25.246 | 34.922 | 30.403 | 42.48 | | 4.995 | 19.114 | 2.489 |
| 5/2/2006 12:00 | 25.241 | 34.902 | 30.303 | 42.443 | | 4.983 | 19.415 | 2.473 |
| 5/2/2006 16:00 | 25.211 | 34.851 | 30.13 | 42.433 | | 4.977 | 19.571 | 2.466 |
| 5/2/2006 20:00 | 25.196 | 34.817 | 30.005 | 42.397 | | 4.985 | 19.494 | 2.463 |
| 5/3/2006 0:00 | 25.201 | 34.815 | 29.919 | 42.378 | | 4.991 | 19.275 | 2.453 |
| 5/3/2006 4:00 | 25.141 | 34.843 | 29.89 | 42.343 | | 4.964 | 19.157 | 2.455 |
| 5/3/2006 8:00 | 25.261 | 34.866 | 29.866 | 42.346 | | 4.967 | 19.113 | 2.461 |
| 5/3/2006 12:00 | 25.246 | 34.905 | 29.844 | 42.36 | | 4.987 | 19.086 | 2.461 |
| 5/3/2006 16:00 | 25.288 | 34.879 | 29.744 | 42.35 | | 4.956 | 19.079 | 2.427 |
| 5/3/2006 20:00 | 25.213 | 34.824 | 29.625 | 42.357 | | 4.952 | 18.896 | 2.415 |
| 5/4/2006 0:00 | 25.181 | 34.8 | 29.564 | 42.353 | | 4.941 | 18.871 | 2.42 |
| 5/4/2006 4:00 | 25.141 | 34.747 | 29.437 | 42.309 | | 4.951 | 18.873 | 2.406 |
| 5/4/2006 8:00 | 25.137 | 34.749 | 29.403 | 42.343 | | 4.951 | 18.822 | 2.414 |
| 5/4/2006 12:00 | 25.141 | 34.73 | 29.315 | 42.313 | | 4.967 | 18.875 | 2.416 |
| 5/4/2006 16:00 | 25.092 | 34.661 | 29.119 | 42.311 | | 4.971 | 18.998 | 2.404 |
| 5/4/2006 20:00 | 25.05 | 34.606 | 28.965 | 42.249 | | 4.988 | 19.041 | 2.402 |
| 5/5/2006 0:00 | 25.06 | 34.606 | 28.9 | 42.237 | | 4.962 | 18.923 | 2.401 |
| 5/5/2006 4:00 | 25.037 | 34.58 | 28.781 | 42.219 | | 4.953 | 18.859 | 2.393 |
| 5/5/2006 8:00 | 25.057 | 34.578 | 28.699 | 42.205 | | 4.956 | 18.818 | 2.391 |
| 5/5/2006 12:00 | 25.062 | 34.563 | 28.59 | 42.193 | | 4.959 | 18.911 | 2.389 |
| 5/5/2006 16:00 | 25.022 | 34.501 | 28.389 | 42.186 | | 4.983 | 19.118 | 2.386 |
| 5/5/2006 20:00 | 25.007 | 34.467 | 28.246 | 42.149 | | 4.969 | 19.047 | 2.387 |
| 5/6/2006 0:00 | 24.968 | 34.461 | 28.172 | 42.126 | | 4.957 | 18.876 | 2.39 |
| 5/6/2006 4:00 | 25.003 | 34.446 | 28.063 | 42.101 | | 4.975 | 18.828 | 2.381 |
| 5/6/2006 8:00 | 25.012 | 34.448 | 27.985 | 42.062 | | 4.969 | 18.764 | 2.382 |
| 5/6/2006 12:00 | 25.012 | 34.431 | 27.882 | 42.059 | | 4.951 | 18.931 | 2.382 |
| 5/6/2006 16:00 | 24.998 | 34.393 | 27.741 | 42.022 | | 4.965 | 19.116 | 2.393 |
| 5/6/2006 20:00 | 24.99 | 34.374 | 27.639 | 41.965 | | 4.965 | 19.031 | 2.404 |
| 5/7/2006 0:00 | 25.305 | 34.384 | 27.591 | 41.978 | | 4.965 | 18.839 | 2.41 |
| 5/7/2006 4:00 | 24.985 | 34.367 | 27.494 | 41.921 | | 4.947 | 18.752 | 2.406 |
| 5/7/2006 8:00 | 25.017 | 34.384 | 27.426 | 41.93 | | 4.955 | 18.762 | 2.408 |
| 5/7/2006 12:00 | 25.017 | 34.363 | 27.317 | 41.9 | | 4.965 | 18.93 | 2.408 |
| 5/7/2006 16:00 | 25 | 34.333 | 27.196 | 41.856 | | 4.959 | 18.994 | 2.414 |
| 5/7/2006 20:00 | 24.995 | 34.309 | 27.09 | 41.828 | | 4.961 | 18.986 | 2.422 |
| 5/8/2006 0:00 | 24.997 | 34.299 | 27.008 | 41.768 | | 4.947 | 18.903 | 2.42 |
| 5/8/2006 4:00 | 24.96 | 34.258 | 26.879 | 41.757 | | 4.947 | 18.899 | 2.414 |
| 5/8/2006 8:00 | 24.995 | 34.269 | 26.837 | 41.727 | | 4.937 | 18.878 | 2.422 |
| 5/8/2006 12:00 | 24.992 | 34.247 | 26.726 | 41.697 | | 4.949 | 19 | 2.431 |
| 5/8/2006 16:00 | 24.974 | 34.222 | 26.616 | 41.63 | | 4.964 | 18.932 | 2.456 |
| 5/8/2006 20:00 | 24.955 | 34.205 | 26.531 | 41.618 | | 4.947 | 18.839 | 2.471 |
| 5/9/2006 0:00 | 25.015 | 34.241 | 26.557 | 41.574 | | 4.937 | 18.652 | 2.488 |
| 5/9/2006 4:00 | 24.975 | 34.209 | 26.487 | 41.579 | | 4.943 | 18.255 | 2.465 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 5/9/2006 8:00 | 24.933 | 34.16 | 26.406 | 41.556 | | 4.941 | 18.28 | 2.457 |
| 5/9/2006 12:00 | 24.928 | 34.158 | 26.408 | 41.523 | | 4.941 | 18.557 | 2.479 |
| 5/9/2006 16:00 | 24.91 | 34.132 | 26.346 | 41.491 | | 4.947 | 18.777 | 2.505 |
| 5/9/2006 20:00 | 24.918 | 34.119 | 26.32 | 41.496 | | 4.947 | 18.684 | 2.532 |
| 5/10/2006 0:00 | 24.923 | 34.115 | 26.302 | 41.514 | | 4.949 | 18.435 | 2.54 |
| 5/10/2006 4:00 | 24.93 | 34.13 | 26.308 | 41.482 | | 4.958 | 18.355 | 2.549 |
| 5/10/2006 8:00 | 24.945 | 34.139 | 26.302 | 41.479 | | 4.952 | 18.4 | 2.561 |
| 5/10/2006 12:00 | 25.005 | 34.175 | 26.33 | 41.491 | | 4.94 | 18.423 | 2.576 |
| 5/10/2006 16:00 | 24.982 | 34.111 | 26.183 | 41.454 | | 4.962 | 18.623 | 2.583 |
| 5/10/2006 20:00 | 24.98 | 34.096 | 26.133 | 41.456 | | 4.96 | 18.623 | 2.61 |
| 5/11/2006 0:00 | 25.012 | 34.113 | 26.133 | 41.447 | | 4.964 | 18.406 | 2.62 |
| 5/11/2006 4:00 | 25.091 | 34.1 | 26.069 | 41.399 | | 4.971 | 18.321 | 2.623 |
| 5/11/2006 8:00 | 25.022 | 34.115 | 26.043 | 41.41 | | 4.944 | 18.354 | 2.631 |
| 5/11/2006 12:00 | 25.059 | 34.141 | 26.041 | 41.406 | | 4.971 | 18.52 | 2.649 |
| 5/11/2006 16:00 | 25.052 | 34.107 | 25.952 | 41.38 | | 4.964 | 18.75 | 2.663 |
| 5/11/2006 20:00 | 25.042 | 34.075 | 25.868 | 41.318 | | 4.96 | 18.698 | 2.685 |
| 5/12/2006 0:00 | 25.054 | 34.072 | 25.828 | 41.315 | | 4.965 | 18.501 | 2.69 |
| 5/12/2006 4:00 | 25.041 | 34.04 | 25.749 | 41.281 | | 4.968 | 18.404 | 2.691 |
| 5/12/2006 8:00 | 25.062 | 34.051 | 25.737 | 41.262 | | 4.975 | 18.367 | 2.7 |
| 5/12/2006 12:00 | 25.071 | 34.043 | 25.695 | 41.209 | | 4.977 | 18.679 | 2.717 |
| 5/12/2006 16:00 | 25.034 | 33.987 | 25.572 | 41.188 | | 4.985 | 18.894 | 2.733 |
| 5/12/2006 20:00 | 25.032 | 33.968 | 25.516 | 41.121 | | 4.975 | 18.781 | 2.756 |
| 5/13/2006 0:00 | 25.041 | 33.972 | 25.508 | 41.121 | | 4.979 | 18.522 | 2.764 |
| 5/13/2006 4:00 | 25.061 | 33.975 | 25.486 | 41.098 | | 4.969 | 18.412 | 2.767 |
| 5/13/2006 8:00 | 25.106 | 34.024 | 25.546 | 41.066 | | 4.963 | 18.367 | 2.781 |
| 5/13/2006 12:00 | 25.143 | 34.051 | 25.564 | 41.068 | | 4.979 | 18.599 | 2.8 |
| 5/13/2006 16:00 | 25.151 | 34.069 | 25.534 | 41.05 | | 4.976 | 18.849 | 2.821 |
| 5/13/2006 20:00 | 25.178 | 34.088 | 25.54 | 41.043 | | 4.988 | 18.779 | 2.845 |
| 5/14/2006 0:00 | 25.22 | 34.13 | 25.609 | 41.089 | | 4.992 | 18.539 | 2.857 |
| 5/14/2006 4:00 | 25.242 | 34.134 | 25.613 | 41.082 | | 4.971 | 18.427 | 2.863 |
| 5/14/2006 8:00 | 25.277 | 34.164 | 25.657 | 41.089 | | 4.99 | 18.481 | 2.87 |
| 5/14/2006 12:00 | 25.307 | 34.184 | 25.673 | 41.087 | | 4.994 | 18.646 | 2.887 |
| 5/14/2006 16:00 | 25.312 | 34.167 | 25.635 | 41.068 | | 4.996 | 18.752 | 2.9 |
| 5/14/2006 20:00 | 25.302 | 34.173 | 25.643 | 41.061 | | 4.984 | 18.752 | 2.923 |
| 5/15/2006 0:00 | 25.344 | 34.199 | 25.675 | 41.057 | | 4.998 | 18.601 | 2.932 |
| 5/15/2006 4:00 | 25.357 | 34.198 | 25.673 | 41.02 | | 4.984 | 18.52 | 2.934 |
| 5/15/2006 8:00 | 25.393 | 34.22 | 25.703 | 41.041 | | 4.992 | 18.535 | 2.942 |
| 5/15/2006 12:00 | 25.406 | 34.228 | 25.701 | 41.036 | | 5 | 18.791 | 2.955 |
| 5/15/2006 16:00 | 25.411 | 34.194 | 25.659 | 41.011 | | 5.019 | 18.952 | 2.976 |
| 5/15/2006 20:00 | 24.626 | 34.171 | 25.631 | 40.951 | | 5.009 | 18.897 | 2.988 |
| 5/16/2006 0:00 | 25.396 | 34.177 | 25.643 | 40.96 | | 5.006 | 18.743 | 2.992 |
| 5/16/2006 4:00 | 25.411 | 34.158 | 25.623 | 40.902 | | 4.988 | 18.669 | 2.993 |
| 5/16/2006 8:00 | 25.418 | 34.188 | 25.639 | 40.907 | | 5.009 | 18.628 | 2.997 |
| 5/16/2006 12:00 | 25.423 | 34.177 | 25.619 | 40.863 | | 5.003 | 18.944 | 3.011 |
| 5/16/2006 16:00 | 25.401 | 34.13 | 25.556 | 40.847 | | 4.999 | 19.037 | 3.032 |
| 5/16/2006 20:00 | 25.388 | 34.1 | 25.52 | 40.803 | | 5.007 | 18.973 | 3.051 |
| 5/17/2006 0:00 | 25.401 | 34.109 | 25.55 | 40.775 | | 4.999 | 18.738 | 3.055 |
| 5/17/2006 4:00 | 25.401 | 34.098 | 25.546 | 40.71 | | 4.991 | 18.64 | 3.057 |
| 5/17/2006 8:00 | 25.408 | 34.109 | 25.576 | 40.724 | | 5.003 | 18.603 | 3.062 |
| 5/17/2006 12:00 | 25.416 | 34.092 | 25.552 | 40.685 | | 5.007 | 18.961 | 3.085 |
| 5/17/2006 16:00 | 25.384 | 34.032 | 25.454 | 40.629 | | 5.005 | 18.978 | 3.108 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 5/17/2006 20:00 | 25.364 | 34.002 | 25.427 | 40.579 | | 4.981 | 18.895 | 3.136 |
| 5/18/2006 0:00 | 25.418 | 34.075 | 25.558 | 40.544 | | 4.981 | 18.62 | 3.152 |
| 5/18/2006 4:00 | 25.448 | 34.105 | 25.604 | 40.572 | | 4.983 | 18.483 | 3.152 |
| 5/18/2006 8:00 | 25.473 | 34.132 | 25.665 | 40.569 | | 4.974 | 18.45 | 3.159 |
| 5/18/2006 12:00 | 25.483 | 34.124 | 25.657 | 40.528 | | 4.977 | 18.872 | 3.181 |
| 5/18/2006 16:00 | 25.46 | 34.092 | 25.609 | 40.495 | | 5.005 | 19.073 | 3.208 |
| 5/18/2006 20:00 | 25.446 | 34.062 | 25.576 | 40.486 | | 4.995 | 18.998 | 3.229 |
| 5/19/2006 0:00 | 25.446 | 34.047 | 25.564 | 40.419 | | 4.987 | 18.758 | 3.229 |
| 5/19/2006 4:00 | 25.436 | 34.017 | 25.54 | 40.408 | | 4.97 | 18.692 | 3.229 |
| 5/19/2006 8:00 | 25.448 | 34.043 | 25.612 | 40.355 | | 4.985 | 18.645 | 3.246 |
| 5/19/2006 12:00 | 25.441 | 34.028 | 25.59 | 40.352 | | 4.989 | 18.99 | 3.262 |
| 5/19/2006 16:00 | 25.458 | 34.032 | 25.598 | 40.304 | | 5.009 | 19.12 | 3.302 |
| 5/19/2006 20:00 | 25.458 | 34.086 | 25.679 | 40.318 | | 4.987 | 18.936 | 3.34 |
| 5/20/2006 0:00 | 25.55 | 34.154 | 25.795 | 40.336 | | 4.979 | 18.603 | 3.347 |
| 5/20/2006 4:00 | 25.562 | 34.165 | 25.829 | 40.338 | | 5.01 | 18.597 | 3.349 |
| 5/20/2006 8:00 | 25.602 | 34.207 | 25.908 | 40.352 | | 5.006 | 18.58 | 3.351 |
| 5/20/2006 12:00 | 25.641 | 34.254 | 26.002 | 40.338 | | 5.02 | 18.738 | 3.379 |
| 5/20/2006 16:00 | 25.646 | 34.245 | 25.992 | 40.336 | | 5.006 | 19.176 | 3.4 |
| 5/20/2006 20:00 | 25.641 | 34.229 | 25.98 | 40.304 | | 5.016 | 19.056 | 3.425 |
| 5/21/2006 0:00 | 25.669 | 34.263 | 26.051 | 40.299 | | 5.006 | 18.758 | 3.427 |
| 5/21/2006 4:00 | 25.666 | 34.248 | 26.041 | 40.283 | | 5.027 | 18.628 | 3.421 |
| 5/21/2006 8:00 | 25.693 | 34.275 | 26.101 | 40.311 | | 5.037 | 18.58 | 3.419 |
| 5/21/2006 12:00 | 25.703 | 34.282 | 26.127 | 40.278 | | 5.049 | 18.957 | 3.44 |
| 5/21/2006 16:00 | 25.698 | 34.269 | 26.109 | 40.294 | | 5.039 | 19.286 | 3.474 |
| 5/21/2006 20:00 | 66.246 | 34.29 | 26.165 | 40.281 | | 5.055 | 19.16 | 3.504 |
| 5/22/2006 0:00 | 30.792 | 34.352 | 26.282 | 40.29 | | 5.049 | 18.839 | 3.51 |
| 5/22/2006 4:00 | 25.85 | 34.35 | 26.286 | 40.29 | | 5.037 | 18.734 | 3.502 |
| 5/22/2006 8:00 | 66.236 | 34.401 | 26.381 | 40.292 | | 5.01 | 18.682 | 3.51 |
| 5/22/2006 12:00 | 25.785 | 34.393 | 26.38 | 40.26 | | 5.012 | 18.911 | 3.525 |
| 5/22/2006 16:00 | 66.228 | 34.365 | 26.342 | 40.267 | | 5.025 | 19.327 | 3.553 |
| 5/22/2006 20:00 | 32.257 | 34.354 | 26.344 | 40.246 | | 5.025 | 19.228 | 3.578 |
| 5/23/2006 0:00 | 30.897 | 34.391 | 26.406 | 40.209 | | 5.027 | 18.98 | 3.58 |
| 5/23/2006 4:00 | 24.788 | 34.38 | 26.399 | 40.197 | | 5.027 | 18.891 | 3.574 |
| 5/23/2006 8:00 | 25.078 | 34.421 | 26.469 | 40.191 | | 5.037 | 18.874 | 3.571 |
| 5/23/2006 12:00 | 25.827 | 34.38 | 26.42 | 40.2 | | 5.05 | 19.205 | 3.585 |
| 5/23/2006 16:00 | 25.783 | 34.363 | 26.368 | 40.165 | | 5.048 | 19.439 | 3.621 |
| 5/23/2006 20:00 | 66.524 | 34.386 | 26.352 | 40.137 | | 5.041 | 19.311 | 3.643 |
| 5/24/2006 0:00 | 28.349 | 34.395 | 26.398 | 40.096 | | 5.069 | 19.071 | 3.644 |
| 5/24/2006 4:00 | 25.812 | 34.378 | 26.382 | 40.1 | | 5.062 | 18.986 | 3.638 |
| 5/24/2006 8:00 | 25.106 | 34.418 | 26.459 | 40.059 | | 5.058 | 18.918 | 3.642 |
| 5/24/2006 12:00 | 25.866 | 34.44 | 26.491 | 40.052 | | 5.069 | 19.305 | 3.672 |
| 5/24/2006 16:00 | 25.864 | 34.44 | 26.461 | 40.066 | | 5.064 | 19.485 | 3.704 |
| 5/24/2006 20:00 | 25.063 | 34.418 | 26.449 | 40.011 | | 5.062 | 19.302 | 3.734 |
| 5/25/2006 0:00 | 66.586 | 34.439 | 26.495 | 40.033 | | 5.075 | 18.943 | 3.736 |
| 5/25/2006 4:00 | 25.872 | 34.436 | 26.503 | 40.01 | | 5.055 | 18.831 | 3.732 |
| 5/25/2006 8:00 | 25.904 | 34.469 | 26.559 | 40.001 | | 5.064 | 18.829 | 3.734 |
| 5/25/2006 12:00 | 66.604 | 34.491 | 26.579 | 39.962 | | 5.087 | 19.238 | 3.764 |
| 5/25/2006 16:00 | 30.99 | 34.503 | 26.545 | 39.974 | | 5.093 | 19.482 | 3.794 |
| 5/25/2006 20:00 | 24.538 | 34.521 | 26.563 | 39.955 | | 5.102 | 19.338 | 3.822 |
| 5/26/2006 0:00 | 24.598 | 34.566 | 26.634 | 39.923 | | 5.106 | 18.974 | 3.822 |
| 5/26/2006 4:00 | 66.472 | 34.555 | 26.648 | 39.943 | | 5.108 | 18.889 | 3.811 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 5/26/2006 8:00 | 25.976 | 34.593 | 26.702 | 39.911 | | 5.098 | 18.912 | 3.805 |
| 5/26/2006 12:00 | 26.004 | 34.642 | 26.756 | 39.944 | | 5.106 | 19.129 | 3.816 |
| 5/26/2006 16:00 | 25.944 | 34.559 | 26.65 | 39.877 | | 5.1 | 19.377 | 3.836 |
| 5/26/2006 20:00 | 66.485 | 34.546 | 26.648 | 39.886 | | 5.071 | 19.363 | 3.861 |
| 5/27/2006 0:00 | 25.963 | 34.559 | 26.678 | 39.837 | | 5.092 | 19.133 | 3.858 |
| 5/27/2006 4:00 | 25.949 | 34.546 | 26.658 | 39.817 | | 5.063 | 19.03 | 3.845 |
| 5/27/2006 8:00 | 25.974 | 34.576 | 26.724 | 39.805 | | 5.09 | 18.995 | 3.841 |
| 5/27/2006 12:00 | 30.885 | 34.598 | 26.753 | 39.798 | | 5.077 | 19.264 | 3.846 |
| 5/27/2006 16:00 | 31.067 | 34.578 | 26.728 | 39.807 | | 5.088 | 19.528 | 3.88 |
| 5/27/2006 20:00 | 25.996 | 34.645 | 26.75 | 39.754 | | 5.078 | 19.442 | 3.906 |
| 5/28/2006 0:00 | 31.146 | 34.702 | 26.865 | 39.794 | | 5.077 | 19.142 | 3.908 |
| 5/28/2006 4:00 | 24.706 | 34.711 | 26.905 | 39.766 | | 5.082 | 19.044 | 3.901 |
| 5/28/2006 8:00 | 25.456 | 34.745 | 26.951 | 39.773 | | 5.068 | 19.053 | 3.899 |
| 5/28/2006 12:00 | 26.112 | 34.768 | 26.986 | 39.8 | | 5.088 | 19.39 | 3.927 |
| 5/28/2006 16:00 | 29.869 | 34.758 | 26.99 | 39.793 | | 5.098 | 19.595 | 3.955 |
| 5/28/2006 20:00 | 69.338 | 34.77 | 27.036 | 39.786 | | 5.086 | 19.483 | 3.98 |
| 5/29/2006 0:00 | 24.793 | 34.796 | 27.102 | 39.796 | | 5.084 | 19.204 | 3.978 |
| 5/29/2006 4:00 | 66.847 | 34.789 | 27.114 | 39.766 | | 5.096 | 19.133 | 3.971 |
| 5/29/2006 8:00 | 26.185 | 34.835 | 27.205 | 39.805 | | 5.09 | 19.111 | 3.977 |
| 5/29/2006 12:00 | 25.476 | 34.948 | 27.273 | 39.828 | | 5.084 | 19.139 | 3.981 |
| 5/29/2006 16:00 | 31.312 | 34.917 | 27.271 | 39.842 | | 5.082 | 19.286 | 3.992 |
| 5/29/2006 20:00 | 66.912 | 34.894 | 27.269 | 39.821 | | 5.072 | 19.431 | 4.017 |
| 5/30/2006 0:00 | 26.334 | 34.934 | 27.354 | 39.805 | | 5.08 | 19.222 | 4.017 |
| 5/30/2006 4:00 | 68.228 | 34.954 | 27.392 | 39.821 | | 5.051 | 19.092 | 3.998 |
| 5/30/2006 8:00 | 68.226 | 34.947 | 27.428 | 39.812 | | 5.078 | 19.063 | 4 |
| 5/30/2006 12:00 | 26.19 | 34.975 | 27.475 | 39.83 | | 5.078 | 19.377 | 4.006 |
| 5/30/2006 16:00 | 26.361 | 34.971 | 27.471 | 39.856 | | 5.08 | 19.692 | 4.033 |
| 5/30/2006 20:00 | 26.261 | 34.937 | 27.438 | 39.826 | | 5.074 | 19.499 | 4.041 |
| 5/31/2006 0:00 | 26.44 | 34.971 | 27.499 | 39.826 | | 5.076 | 19.346 | 4.033 |
| 5/31/2006 4:00 | 31.176 | 34.975 | 27.508 | 39.794 | | 5.078 | 19.257 | 4.022 |
| 5/31/2006 8:00 | 26.452 | 34.999 | 27.553 | 39.796 | | 5.091 | 19.228 | 4.016 |
| 5/31/2006 12:00 | 26.316 | 35.018 | 27.583 | 39.83 | | 5.091 | 19.504 | 4.031 |
| 5/31/2006 16:00 | 26.279 | 35.005 | 27.573 | 39.791 | | 5.095 | 19.35 | 4.035 |
| 5/31/2006 20:00 | 26.214 | 34.954 | 27.545 | 39.796 | | 5.076 | 19.284 | 4.037 |
| 6/1/2006 0:00 | 26.204 | 34.984 | 27.613 | 39.772 | | 5.085 | 19.167 | 4.028 |
| 6/1/2006 4:00 | 26.174 | 34.939 | 27.581 | 39.789 | | 5.109 | 19.146 | 4.01 |
| 6/1/2006 8:00 | 26.174 | 34.948 | 27.635 | 39.789 | | 5.073 | 19.109 | 4.001 |
| 6/1/2006 12:00 | 26.162 | 34.941 | 27.641 | 39.784 | | 5.093 | 19.344 | 4.01 |
| 6/1/2006 16:00 | 26.147 | 34.926 | 27.621 | 39.745 | | 5.079 | 19.363 | 4.025 |
| 6/1/2006 20:00 | 26.14 | 34.913 | 27.625 | 39.757 | | 5.091 | 19.297 | 4.023 |
| 6/2/2006 0:00 | 26.142 | 34.931 | 27.662 | 39.763 | | 5.07 | 19.175 | 4.014 |
| 6/2/2006 4:00 | 26.142 | 34.933 | 27.674 | 39.747 | | 5.076 | 19.105 | 4.001 |
| 6/2/2006 8:00 | 26.147 | 34.941 | 27.71 | 39.749 | | 5.075 | 19.08 | 3.995 |
| 6/2/2006 12:00 | 26.155 | 34.96 | 27.724 | 39.745 | | 5.083 | 19.425 | 4.019 |
| 6/2/2006 16:00 | 26.147 | 34.965 | 27.676 | 39.701 | | 5.108 | 19.779 | 4.055 |
| 6/2/2006 20:00 | 26.132 | 34.958 | 27.651 | 39.71 | | 5.101 | 19.694 | 4.072 |
| 6/3/2006 0:00 | 26.137 | 34.984 | 27.672 | 39.701 | | 5.099 | 19.382 | 4.061 |
| 6/3/2006 4:00 | 26.13 | 34.952 | 27.667 | 39.65 | | 5.083 | 19.272 | 4.049 |
| 6/3/2006 8:00 | 26.145 | 34.965 | 27.704 | 39.646 | | 5.11 | 19.221 | 4.049 |
| 6/3/2006 12:00 | 26.14 | 34.965 | 27.689 | 39.657 | | 5.099 | 19.487 | 4.074 |
| 6/3/2006 16:00 | 26.117 | 34.945 | 27.621 | 39.595 | | 5.116 | 19.874 | 4.106 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 6/3/2006 20:00 | 26.12 | 34.948 | 27.627 | 39.569 | | 5.097 | 19.727 | 4.119 |
| 6/4/2006 0:00 | 26.107 | 34.935 | 27.627 | 39.579 | | 5.112 | 19.436 | 4.108 |
| 6/4/2006 4:00 | 26.122 | 34.935 | 27.635 | 39.558 | | 5.097 | 19.326 | 4.091 |
| 6/4/2006 8:00 | 26.107 | 34.935 | 27.679 | 39.558 | | 5.081 | 19.127 | 4.079 |
| 6/4/2006 12:00 | 26.075 | 34.909 | 27.68 | 39.514 | | 5.087 | 19.343 | 4.089 |
| 6/4/2006 16:00 | 26.05 | 34.881 | 27.661 | 39.526 | | 5.09 | 19.651 | 4.119 |
| 6/4/2006 20:00 | 26.038 | 34.877 | 27.673 | 39.514 | | 5.099 | 19.591 | 4.134 |
| 6/5/2006 0:00 | 26.053 | 34.896 | 27.732 | 39.514 | | 5.075 | 19.355 | 4.121 |
| 6/5/2006 4:00 | 26.053 | 34.888 | 27.738 | 39.509 | | 5.081 | 19.285 | 4.106 |
| 6/5/2006 8:00 | 26.045 | 34.886 | 27.752 | 39.475 | | 5.108 | 19.247 | 4.096 |
| 6/5/2006 12:00 | 26.058 | 34.905 | 27.794 | 39.502 | | 5.088 | 19.417 | 4.119 |
| 6/5/2006 16:00 | 26.035 | 34.867 | 27.744 | 39.459 | | 5.065 | 19.496 | 4.128 |
| 6/5/2006 20:00 | 26.018 | 34.849 | 27.726 | 39.472 | | 5.059 | 19.436 | 4.117 |
| 6/6/2006 0:00 | 26.021 | 34.852 | 27.76 | 39.461 | | 5.069 | 19.337 | 4.106 |
| 6/6/2006 4:00 | 26.005 | 34.83 | 27.742 | 39.44 | | 5.055 | 19.308 | 4.089 |
| 6/6/2006 8:00 | 26.03 | 34.856 | 27.804 | 39.44 | | 5.076 | 19.266 | 4.081 |
| 6/6/2006 12:00 | 26.015 | 34.867 | 27.837 | 39.449 | | 5.067 | 19.492 | 4.1 |
| 6/6/2006 16:00 | 26.043 | 34.869 | 27.824 | 39.445 | | 5.069 | 19.872 | 4.136 |
| 6/6/2006 20:00 | 26.035 | 34.867 | 27.839 | 39.433 | | 5.127 | 19.742 | 4.159 |
| 6/7/2006 0:00 | 26.082 | 34.905 | 27.913 | 39.459 | | 5.106 | 19.386 | 4.151 |
| 6/7/2006 4:00 | 26.097 | 34.924 | 27.949 | 39.472 | | 5.113 | 19.337 | 4.14 |
| 6/7/2006 8:00 | 26.134 | 34.973 | 28.035 | 39.479 | | 5.119 | 19.256 | 4.14 |
| 6/7/2006 12:00 | 26.152 | 34.982 | 28.039 | 39.491 | | 5.125 | 19.566 | 4.168 |
| 6/7/2006 16:00 | 26.144 | 34.971 | 28.018 | 39.493 | | 5.137 | 19.916 | 4.198 |
| 6/7/2006 20:00 | 26.152 | 34.969 | 28.02 | 39.489 | | 5.127 | 19.742 | 4.219 |
| 6/8/2006 0:00 | 26.169 | 34.995 | 28.054 | 39.491 | | 5.121 | 19.479 | 4.212 |
| 6/8/2006 4:00 | 26.164 | 34.984 | 28.044 | 39.489 | | 5.115 | 19.413 | 4.2 |
| 6/8/2006 8:00 | 26.209 | 35.031 | 28.112 | 39.466 | | 5.109 | 19.432 | 4.199 |
| 6/8/2006 12:00 | 26.206 | 35.029 | 28.102 | 39.47 | | 5.123 | 19.719 | 4.231 |
| 6/8/2006 16:00 | 26.184 | 34.995 | 28.042 | 39.486 | | 5.111 | 19.937 | 4.257 |
| 6/8/2006 20:00 | 26.189 | 34.984 | 28.02 | 39.433 | | 5.124 | 19.869 | 4.274 |
| 6/9/2006 0:00 | 26.201 | 34.999 | 28.04 | 39.422 | | 5.117 | 19.585 | 4.264 |
| 6/9/2006 4:00 | 26.201 | 34.997 | 28.03 | 39.426 | | 5.107 | 19.471 | 4.251 |
| 6/9/2006 8:00 | 26.201 | 34.997 | 28.024 | 39.408 | | 5.119 | 19.434 | 4.249 |
| 6/9/2006 12:00 | 26.206 | 35.033 | 27.993 | 39.385 | | 5.136 | 19.722 | 4.279 |
| 6/9/2006 16:00 | 26.179 | 34.988 | 27.909 | 39.338 | | 5.133 | 20.044 | 4.302 |
| 6/9/2006 20:00 | 26.169 | 35.012 | 27.881 | 39.288 | | 5.103 | 19.937 | 4.321 |
| 6/10/2006 0:00 | 26.169 | 34.988 | 27.875 | 39.26 | | 5.121 | 19.666 | 4.311 |
| 6/10/2006 4:00 | 26.164 | 34.973 | 27.871 | 39.23 | | 5.111 | 19.556 | 4.302 |
| 6/10/2006 8:00 | 26.186 | 35.005 | 27.931 | 39.195 | | 5.115 | 19.455 | 4.3 |
| 6/10/2006 12:00 | 26.199 | 35.007 | 27.937 | 39.223 | | 5.134 | 19.461 | 4.293 |
| 6/10/2006 16:00 | 26.191 | 34.99 | 27.911 | 39.207 | | 5.117 | 19.556 | 4.296 |
| 6/10/2006 20:00 | 26.191 | 35.001 | 27.927 | 39.195 | | 5.111 | 19.658 | 4.313 |
| 6/11/2006 0:00 | 26.241 | 35.061 | 28.015 | 39.202 | | 5.088 | 19.469 | 4.3 |
| 6/11/2006 4:00 | 26.258 | 35.08 | 28.104 | 39.262 | | 5.081 | 19.459 | 4.291 |
| 6/11/2006 8:00 | 26.273 | 35.116 | 28.158 | 39.288 | | 5.086 | 19.358 | 4.283 |
| 6/11/2006 12:00 | 26.291 | 35.127 | 28.186 | 39.313 | | 5.091 | 19.492 | 4.27 |
| 6/11/2006 16:00 | 26.293 | 35.133 | 28.215 | 39.334 | | 5.079 | 19.595 | 4.276 |
| 6/11/2006 20:00 | 26.29 | 35.157 | 28.269 | 39.334 | | 5.117 | 19.538 | 4.278 |
| 6/12/2006 0:00 | 26.335 | 35.187 | 28.341 | 39.369 | | 5.103 | 19.463 | 4.27 |
| 6/12/2006 4:00 | 26.345 | 35.195 | 28.379 | 39.401 | | 5.093 | 19.424 | 4.259 |

TABLE S2.2 (Cont.)

| | Depth to Water Level in Indicated Well (ft below TOC) | | | | | | | |
|-----------------|---|--------|--------|--------|------|-------|--------|-------|
| | MW1S | MW2S | MW3S | MW4S | MW5S | MW6S | MW7S | MW8S |
| 6/12/2006 8:00 | 26.382 | 35.236 | 28.484 | 39.477 | | 5.083 | 19.44 | 4.257 |
| 6/12/2006 12:00 | 26.397 | 35.24 | 28.486 | 39.486 | | 5.091 | 19.54 | 3.918 |
| 6/12/2006 16:00 | 26.399 | 35.242 | 28.476 | 39.498 | | 5.107 | 19.761 | 39.09 |
| 6/12/2006 20:00 | 26.38 | 35.219 | 28.454 | 39.496 | | 5.093 | 19.829 | 39.09 |
| 6/13/2006 0:00 | 26.407 | 35.249 | 28.516 | 39.475 | | 5.122 | 19.645 | 4.285 |
| 6/13/2006 4:00 | 26.412 | 35.245 | 28.5 | 39.512 | | 5.142 | 19.54 | 4.268 |
| 6/13/2006 8:00 | 26.422 | 35.255 | 28.532 | 39.516 | | 5.134 | 19.494 | 4.259 |
| 6/13/2006 12:00 | 26.409 | 35.249 | 28.512 | 39.523 | | 5.139 | 19.726 | 4.278 |
| 6/13/2006 16:00 | 26.404 | 35.219 | 28.44 | 39.505 | | 5.136 | 20.065 | 4.31 |
| 6/13/2006 20:00 | 26.392 | 35.206 | 28.415 | 39.449 | | 5.122 | 20.047 | 4.332 |
| 6/14/2006 0:00 | 26.404 | 35.219 | 28.436 | 39.438 | | 5.129 | 19.8 | 4.323 |
| 6/14/2006 4:00 | 26.409 | 35.219 | 28.422 | 39.447 | | 5.143 | 19.687 | 4.308 |
| 6/14/2006 8:00 | 26.412 | 35.228 | 28.438 | 39.435 | | 5.122 | 19.631 | 4.304 |
| 6/14/2006 12:00 | 26.404 | 35.217 | 28.4 | 39.387 | | 5.118 | 19.871 | 4.332 |
| 6/14/2006 16:00 | 26.394 | 35.187 | 28.329 | 39.343 | | 5.135 | 20.187 | 4.362 |
| 6/14/2006 20:00 | 26.385 | 35.183 | 28.307 | 39.327 | | 5.134 | 20.078 | 4.381 |
| 6/15/2006 0:00 | 26.399 | 35.21 | 28.345 | 39.295 | | 5.114 | 19.85 | 4.37 |
| 6/15/2006 4:00 | 26.382 | 35.185 | 28.277 | 39.29 | | 5.122 | 19.79 | 4.357 |
| 6/15/2006 8:00 | 26.412 | 35.217 | 28.345 | 39.299 | | 5.12 | 19.711 | 4.36 |
| 6/15/2006 12:00 | 26.429 | 35.236 | 28.377 | 39.318 | | 5.147 | 19.819 | 4.385 |
| 6/15/2006 16:00 | 26.392 | 35.21 | 28.315 | 39.297 | | 5.143 | 20.047 | 4.407 |
| 6/15/2006 20:00 | 26.404 | 35.202 | 28.289 | 39.267 | | 5.133 | 20.126 | 4.426 |
| 6/16/2006 0:00 | 26.452 | 35.253 | 28.394 | 39.265 | | 5.114 | 19.931 | 4.421 |
| 6/16/2006 4:00 | 26.479 | 35.268 | 28.428 | 39.322 | | 5.131 | 19.809 | 4.403 |
| 6/16/2006 8:00 | 26.489 | 35.277 | 28.444 | 39.334 | | 5.149 | 19.766 | 4.396 |
| 6/16/2006 12:00 | 26.486 | 35.262 | 28.42 | 39.334 | | 5.179 | 19.995 | 4.428 |
| 6/16/2006 16:00 | 26.481 | 35.238 | 28.355 | 39.265 | | 5.172 | | 4.458 |

Supplement 3:

Quality Control for Sample Collection, Handling, and Analysis

Supplement 3:

Quality Control for Sample Collection, Handling, and Analysis

Groundwater monitoring was conducted at Morrill, Kansas, in 2005–2006, as outlined in the site-specific monitoring *Work Plan* (Argonne 2005a) and the *Master Work Plan* (Argonne 2002). The initial monitoring event of the twice yearly, two-year program occurred in September 2005. In January 2006 the monitoring well network was expanded through the installation of three additional wells. The second monitoring event of the two-year program occurred in March 2006. Supplement 3 reports on the results of QA/QC activities during these first two monitoring events. The review of the quality of the analytical data generated during site monitoring was consistent with regulatory guidelines (EPA 1994).

S3.1 Sampling to Monitor Sampling Collection, Handling, and Analysis Procedures

Sample collection and handling activities were monitored by the documentation of samples as they were collected and the use of chain-of-custody (COC) forms (Supplement 4, on CD) and custody seals to ensure sample integrity during the handling and shipment of samples. The QA/QC samples collected during the 2005–2006 monitoring at Morrill included a field blank, equipment rinsates, trip blanks, replicate samples, and waste characterization samples. The QA/QC samples are listed in Table S3.1. Analytical results for these samples are in Table S3.2.

S3.1.1 Field Blank

One field blank of water used during monitoring activities was collected. Neither carbon tetrachloride nor chloroform was detected (Table S3.2).

S3.1.2 Equipment Rinsates

Four equipment rinsates were collected to monitor decontamination procedures for reusable sampling equipment. Carbon tetrachloride was not detected in the rinsates (Table S3.2), indicating that cross-contamination of groundwater samples did not occur during sample collection.

S3.1.3 Trip Blanks

As an indicator of cross-contamination of samples during shipment, 20 trip blanks were prepared and included with water samples shipped for organic analysis or methane analysis. Included in this total were 9 trip blanks sent to the AGEM Laboratory with samples for VOCs analyses; 2 trip blank sent to EnviroSystems, Inc. (ENVSYS), with samples for verification organic analysis; and 8 trip blanks sent to Severn-Trent Laboratories (STL) with samples for methane analysis. In addition, 1 trip blank was shipped with monitoring well vapor samples to Microseeps, Inc., for dissolved hydrogen analysis. Results for the trip blanks (Table S3.2) indicate that sample handling procedures were followed during the sampling event and that cross-contamination of samples did not occur during shipment.

S3.1.4 Replicate Groundwater Samples

As an indicator of the consistency of the sampling methodology and to provide a measure of analytical precision, eight replicate groundwater samples were collected, including four submitted to the AGEM Laboratory for VOCs analyses, two submitted to ENVSYS for verification VOCs analyses, and two submitted to STL for inorganic and attenuation parameter analyses.

S3.1.5 Waste Characterization Samples

Six waste characterization samples were collected in September 2005, February 2006, and March 2006 for analysis at the AGEM Laboratory to determine the appropriate waste handling and disposal procedures. Samples of the stored wastewater and waste soil were also analyzed by M.D. Chemical and Testing in June 2006 (Supplement 5, on CD).

S3.2 Quality Control for Organic Analysis of Water Samples at the AGEM Laboratory

Groundwater sampling was conducted at 15 locations, including 12 monitoring wells and 3 private wells. Water samples shipped to the AGEM Laboratory were analyzed by the purge-and-trap method with a GC-MS system. For the purge-and-trap analyses, the VOCs present in

each groundwater sample were extracted (purged) from the sample matrix by bubbling an inert gas through the sample. The purged components were trapped in a specified sorbent tube. After the purging, the sorbent tube was heated and backflushed with an inert gas to desorb the components into the GC-MS system. The compounds eluting from the GC column were identified by retention time and by comparison with reference library spectra. The concentration of each component was calculated by comparison of the MS response with corresponding calibration curves, the responses for internal standards, or both. The internal standard recovery limits were 80–120%. Calibration checks with each SDG were required to be within $\pm 20\%$ of the standard.

Samples submitted to the AGEM Laboratory for organic analysis were analyzed in nine SDGs, as shown in Table S3.3. The QA/QC procedures followed included analysis of instrument calibration check standards, analysis of laboratory blanks, monitoring of surrogate spike recovery, and analysis of blind replicate samples. Significant results include the following:

- Samples shipped to the AGEM Laboratory were received with custody seals intact and at the appropriate temperature. All samples were analyzed within required holding times.
- Carbon tetrachloride and chloroform, contaminants of concern in the investigation, were not detected in laboratory method blanks analyzed with the samples. Methylene chloride was detected in the blank associated with some samples, resulting in qualification of the associated organic results (Table S1.3).
- For each SDG, analytical instrument calibration was monitored by the analysis of calibration check standards. The RPD values between the known and calculated concentrations of calibration check standards in all SDGs were within the acceptable range of $\pm 20\%$ (Table S3.3).
- Surrogate standard determinations were performed on samples and blanks by using surrogate spike compounds fluorobenzene, bromofluorobenzene, and 1,4-dichlorobenzene- d_4 . The surrogate recoveries were within the specified range of 80–120% for all samples in either the initial analysis of the sample or a successful reanalysis (Table S3.3).

- Blind replicate groundwater samples were analyzed as a measure of consistency in the sampling and analytical methodologies. Table S3.4 summarizes the analytical results for carbon tetrachloride and chloroform for the primary samples and the associated replicate analyses. Consistency in both the sampling and analytical methodologies is indicated by the average RPD values of 16.4% for carbon tetrachloride and 12.5% for chloroform. Methylene chloride was not detected in any of the sample–replicate pairs analyzed at the AGEM Laboratory.

The analytical data from the AGEM Laboratory are acceptable for quantitative determination of contaminant distribution.

S3.3 Quality Control for Verification Organic Analysis of Groundwater Samples by ENVSY

In accordance with the QA/QC procedures defined in the *Master Work Plan* (Argonne 2002), the analyses of water samples at the AGEM Laboratory with EPA Method 524.2 were verified by a second laboratory using EPA-defined CLP methodology. Two groundwater samples — one from the existing monitoring well MW3S and the other from the KDHE-approved compliance well MW11S, installed in January 2006 — were analyzed according to CLP methodology at ENVSY. The results were reported in one SDG. The ENVSY data sheets are in Supplement 4, on CD. The quality of the ENVSY organic analytical data, obtained by using CLP methodology, is discussed below.

The QA/QC procedures followed in the CLP analysis included initial and continuing calibration of instruments, analysis of laboratory blanks, monitoring of surrogate spike recovery, and matrix spike/matrix spike duplicate analyses. Significant results include the following:

- Samples shipped to the CLP laboratory were received with custody seals intact and at the appropriate temperature. All samples were analyzed within required holding times.
- Analytical instruments were properly tuned; initial and continuing calibration checks remained within the allowable range for all contaminants of interest.

- Surrogate standard determinations were performed on samples and blanks by using the surrogate spike compounds toluene-d₈, bromofluorobenzene, and 1,2-dichloroethane-d₄. Table S3.5 shows the percent recovery of the system-monitoring compounds for each CLP analysis. The recovery values for the surrogate spikes were within the acceptable range (identified in Table S3.5) specific to each surrogate for the two replicate groundwater samples.
- The recovery of spike compounds and the RPD value for a spike/spike duplicate analysis conducted with the SDG was within QC limits.
- Carbon tetrachloride and chloroform were not detected in the laboratory method blanks. Methylene chloride was present in laboratory blanks at low concentrations, similar to the concentrations reported in all samples. As a result, the methylene chloride results for the verification samples are qualified (Table S3.6).

Analytical results for groundwater samples analyzed at AGEM Laboratory with EPA Method 524.2 are supported by the analytical results from ENVSY obtained with EPA CLP methodology. The verification organic results for the groundwater samples are summarized in Table S3.6.

Agreement between the two laboratories is acceptable, although for both samples higher carbon tetrachloride concentrations were reported by the AGEM Laboratory than by ENVSY. The sample from monitoring well MW3S, which has consistently had the highest level of carbon tetrachloride contamination during long-term monitoring, was analyzed by the AGEM Laboratory with a concentration of 91 µg/L and by ENVSY with a concentration of 62 µg/L, for an RPD value of 37.9%. Similarly, the sample from the newly installed downgradient monitoring well MW11S was analyzed by the AGEM Laboratory with a concentration of 39 µg/L and by ENVSY with a concentration of 30 µg/L, for an RPD value of 26.0%.

S3.4 Quality Control for Attenuation Parameter Analyses of Groundwater Samples by STL and Microseeps

Groundwater samples were collected in both September 2005 and March 2006 for analyses by STL to aid in evaluation of biodegradation processes according to EPA (1998a) protocols. The analyses included dissolved anion concentrations (chloride, sulfate, nitrate, and

phosphate) by EPA Method 300, total alkalinity by EPA Method 310.1, nitrate/nitrite nitrogen by EPA Method 353.2, nitrite nitrogen by EPA Method 354.1, sulfide by EPA Method 376.2, total organic carbon by EPA Method 415.1, and dissolved metals (aluminum, calcium, iron, magnesium, manganese, phosphorus, potassium, silicon, sodium, and zinc) by EPA Method 6010 (EPA 1998b). Analysis for the natural attenuation indicators methane, ethane, and ethane was conducted by using Method RSK-175 (Kampbell and Vandegrift, 1998). In addition, groundwater samples were collected in September 2005 from selected wells for dissolved hydrogen analysis by Microseeps Inc., with Method AM20GAX. The STL and Microseeps data sheets are in Supplement 4, on CD.

The inorganic and attenuation parameter analyses of the groundwater samples were conducted by STL in seven SDGs. The QA/QC procedures followed included instrument calibration through analysis of spiked calibration check standards, verification of interelement and background correction factors through analysis of inductively coupled plasma interference check samples, and analysis of laboratory QC samples.

Significant points are as follows:

- Samples shipped to STL and Microseeps were received with custody seals intact and at the appropriate temperature. Although the analyses of some samples at STL for nitrate and phosphate were performed beyond the 48-hr holding time specified by Method 300, the primary analyses of the samples for nitrate nitrogen were performed with Method 353.2 and preserved sample volumes. Holding times were met for other analyses.
- Analytical instruments at STL were properly tuned, and initial calibration checks were within the allowable limits. However, an observed offset in the continuing calibration associated with the ion chromatography analyses in some SDGs elevated results at or near the reporting limit. This trend is reflected in the positive results for some method blanks and performance blanks. The concentrations of associated samples were sufficiently elevated that qualification of the data is not warranted.
- Contaminants of concern were not detected in the laboratory method blanks associated with the samples; in the trip blanks shipped with samples to STL for

methane, ethane, and ethane analyses; or in the samples shipped to Microseeps for dissolved hydrogen analysis.

- Groundwater sample MRMW8S-W-19265 was improperly filtered prior to dissolved cation analysis in SDG 109712 at STL. The results are rejected as non-representative and are not reported (Table S1.4).
- Spiked samples were prepared by STL and analyzed with the investigational samples to evaluate the accuracy and precision the analytical methodology. Table S3.7 shows the percent recovery of each spike compound in these analyses. The recoveries of the target analytes were within the acceptable limits.
- The results for two blind replicate samples analyzed by STL agreed well with their associated primary samples, as shown in Table S3.8, with RPD values of 0.0%–25.4%.

The attenuation parameter results for groundwater samples from STL and Microseeps are acceptable for evaluation of biodegradation processes on the basis of the recovery of known concentrations of the analytes of concern in laboratory QC samples and the absence of contaminants in the trip blanks analyzed with the groundwater samples.

TABLE S3.1 Quality control samples collected during 2005–2006 monitoring at Morrill, Kansas.

| Location | Sample | Sample Date | Time | Depth (ft below TOC) ^a | Sample Description |
|---------------------------|----------------|-------------|-------|-----------------------------------|--|
| <i>Field Blank</i> | | | | | |
| QC | MRQCD-W-16548 | 02/01/06 | 18:00 | – | Blank of water used during installation of monitoring wells MW9S, MW10S, and MW11S. |
| <i>Equipment Rinsates</i> | | | | | |
| QC | MRQCRI-W-16524 | 09/14/05 | 17:30 | – | Rinsate of decontaminated Redi-Flo purge hose after sampling at MW2S. |
| QC | MRQCRI-W-16525 | 09/14/05 | 17:35 | – | Rinsate of decontaminated bailer after sampling at MW8S. |
| QC | MRQCRI-W-19995 | 03/22/06 | 11:30 | – | Rinsate of decontaminated sampling tube after sampling at MW11S. |
| QC | MRQCRI-W-20019 | 03/23/06 | 8:50 | – | Rinsate of decontaminated sampling tube after sampling at MW3S. |
| <i>Trip Blanks</i> | | | | | |
| QC | MRQCTB-W-16519 | 09/13/05 | 12:00 | – | Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 1089. |
| QC | MRQCTB-W-16520 | 09/13/05 | 12:00 | – | Trip blank sent to STL for methane analysis with samples listed on COC 1095. |
| QC | MRQCTB-W-16522 | 09/14/05 | 8:45 | – | Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 1893. |
| QC | MRQCTB-W-16523 | 09/14/05 | 8:45 | – | Trip blank sent to STL for methane analysis with samples listed on COC 1094. |
| QC | MRQCTB-W-16526 | 09/14/05 | 17:40 | – | Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 1516. |
| QC | MRQCTB-W-16527 | 09/14/05 | 17:41 | – | Trip blank sent to STL for methane analysis with samples listed on COC 1515. |
| QC | H2-Trip Blank | 09/14/05 | | – | Trip blank sent to Microseeps, Inc., for dissolved hydrogen analysis with samples listed on COC 1548B. |
| QC | EVTB3-W-13226 | 02/01/06 | | – | Trip blank sent to the AGEM Laboratory with samples listed on COC 3242. |
| QC | EVFB-W-13239 | 02/14/06 | 15:57 | – | Trip blank sent to the AGEM Laboratory with samples listed on COC 4547. |
| QC | MRQCFB-W-19997 | 03/20/06 | 12:45 | – | Trip blank sent to the AGEM Laboratory with samples listed on COC 4515. |
| QC | MRQCFB-W-19998 | 03/20/06 | 12:45 | – | Trip blank sent to STL for attenuation parameter analysis with samples listed on COC 4516. |
| QC | MRQCFB-W-20010 | 03/21/06 | 16:20 | – | Trip blank sent to STL for attenuation parameter analysis with samples listed on COC 4211. |
| QC | MRQCFB-W-20011 | 03/21/06 | 16:30 | – | Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 4210. |

TABLE S3.1 (Cont.)

| Location | Sample | Sample Date | Time | Depth (ft below TOC) ^a | Sample Description |
|---|------------------|-------------|-------|-----------------------------------|---|
| <i>Trip Blanks (cont.)</i> | | | | | |
| QC | MRQCFB-W-20007 | 03/22/06 | 15:04 | – | Trip blank sent to ENVSY for verification organic analysis with MW11S sample listed on COC 3770. |
| QC | MRQCTB-W-20009 | 03/22/06 | 16:30 | – | Trip blank sent to STL for attenuation parameter analysis with samples listed on COC 4212. |
| QC | MRQCTB-W-20012 | 03/22/06 | 16:45 | – | Trip blank sent to STL for attenuation parameter analysis with samples listed on COC 3772. |
| QC | MRQCTB-W-20013 | 03/22/06 | 16:50 | – | Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 3771. |
| QC | EVQCTB-W-20105 | 03/23/06 | 18:15 | – | Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 4285 (Morrill and Everest samples) and COC 4286 (Everest samples). |
| QC | MRQCTB-W-20017 | 03/23/06 | 18:30 | – | Trip blank sent to STL for attenuation parameter analysis with samples listed on COC 3777. |
| QC | EVQCTB-W-26120 | 03/23/06 | | | Trip blank sent to ENVSY for verification organic analysis with MW3S sample listed on COC 3773. |
| <i>Waste Characterization Samples</i> | | | | | |
| QC | MRQCWADR-W-16510 | 09/14/05 | 16:00 | – | Composite sample of waste purge water accumulated during September 2005 sampling. |
| MW9S | MR09S-G-16549 | 02/14/06 | 10:49 | 38.83–53.83 | Well located at south fence line. Depth to water = 19.5 ft below TOC. Depth of well = 68.64 ft below TOC. Sample collected prior to development. |
| MW11S | MR11S-G-16550 | 02/14/06 | 11:17 | 53–68 | Well located at west fence line. Depth to water = 37.35 ft below TOC. Depth of well = 73.60 ft below TOC. Sample collected prior to development. |
| MW10S | MR10S-G-16552 | 02/14/06 | 11:48 | 30–45 | Depth to water = 11.80 ft below TOC. Depth of well = 49.65 ft below TOC. Sample collected prior to development. |
| QC | MRCM-G-16553 | 02/14/06 | 14:22 | – | Sample of combined development water from MW9S, MW10S, and MW11S. |
| QC | MRQCDR-W-20020 | 03/23/06 | 10:15 | – | Composite sample of purge water accumulated during the March 2006 sampling event. |
| <i>Replicates Submitted to the AGEM Laboratory for Organic Analysis</i> | | | | | |
| MW3S | MRQCDU-W-16521 | 09/13/05 | 17:00 | 18–48 | Replicate of sample MRMW3S-W-19261. |

TABLE S3.1 (Cont.)

| Location | Sample | Sample Date | Time | Depth (ft below TOC) ^a | Sample Description |
|--|-------------------|-------------|-------|-----------------------------------|---|
| <i>Replicates Submitted to the AGEM Laboratory for Organic Analysis (cont.)</i> | | | | | |
| MW11S | MR11S-G-16551 | 02/14/06 | 11:29 | 53–68 | Replicate of waste characterization sample MR11S-G-16550. |
| MW11S | MRQCDU-W-20002 | 03/22/06 | 11:25 | 53–68 | Replicate of sample MRMW11S-W-20001. |
| MW3S | MRQCDU-W-20014 | 03/23/06 | 8:35 | 18–48 | Replicate of sample MRMW3S-W-19994. |
| <i>Samples Submitted to ENVSY for Verification Organic Analysis</i> | | | | | |
| MW11S | MRQCMW11S-W-20006 | 03/22/06 | 11:25 | 53–68 | Aliquots of sample MRMW11S-W-20001 sent to ENVSY for verification organic analysis. |
| MW3S | MRMW3S-W-19994 | 03/23/06 | 8:35 | 18–48 | Existing 4-in. well south of former CCC/USDA facility. Depth to water from TOC = 35.62 ft. Depth of well = 49.74 ft below TOC. Sample collected after purging of 28 gal at approximately 1 gpm. |
| <i>QC Replicates Submitted to STL for Inorganic and Attenuation Parameter Analyses</i> | | | | | |
| MW11S | MRQCDU-W-20005 | 03/22/06 | 11:25 | 53–68 | Aliquots of sample MRMW11S-W-20001 sent to STL for inorganic and attenuation parameter analyses. |
| MW3S | MRQCDU-W-20016 | 03/23/06 | 8:35 | 18–48 | Aliquots of sample MRMW3S-W-19994 sent to STL for inorganic and attenuation parameter analyses. |

^a TOC, top of casing.

TABLE S3.2 Results for organic analyses on quality control samples collected to monitor sample collection and handling activities.

| Sample | | Sample Date | Medium | Type ^a | Analysis Date | Method ^b | Laboratory | Concentration (units as specified) | | | | | | | Units |
|--|---------|-------------|--------|-------------------|---------------|---------------------|-----------------|------------------------------------|----------------------|--------------------|------------|---------|--------------------|--------------------|-------|
| | | | | | | | | Carbon | | Methylene Chloride | Chloroform | Methane | Dissolved Hydrogen | Quantitation Limit | |
| | | | | | | | | Tetrachloride | | | | | | | |
| September 2005 Sampling Event | | | | | | | | | | | | | | | |
| MRQCTB-W-16519 | 9/13/05 | Water | TB | 9/14/05 | 524.2 | AGEM | ND ^c | 0.7 J ^d | ND | – ^e | – | 1 | µg/L | | |
| MRQCTB-W-16520 | 9/13/05 | Water | TB | 9/14/05 | RSK-175 | STL | – | – | – | < 2 | – | 1 | µg/L | | |
| MRQCWADR-W-16510 | 9/14/05 | Water | BT | 9/16/05 | 524.2 | AGEM | 13 | 2.9 | ND | – | – | 1 | µg/L | | |
| MRQCRI-W-16524 | 9/14/05 | Water | RI | 9/16/05 | 524.2 | AGEM | ND | 0.5 J | ND | – | – | 1 | µg/L | | |
| MRQCRI-W-16525 | 9/14/05 | Water | RI | 9/16/05 | 524.2 | AGEM | ND | 0.5 J | ND | – | – | 1 | µg/L | | |
| MRQCTB-W-16522 | 9/14/05 | Water | TB | 9/15/05 | 524.2 | AGEM | ND | 1 | ND | – | – | 1 | µg/L | | |
| MRQCTB-W-16526 | 9/14/05 | Water | TB | 9/16/05 | 524.2 | AGEM | ND | 0.5 J | ND | – | – | 1 | µg/L | | |
| MRQCTB-W-16523 | 9/14/05 | Water | TB | 9/15/05 | RSK-175 | STL | – | – | – | < 2 | – | 1 | µg/L | | |
| MRQCTB-W-16527 | 9/14/05 | Water | TB | 9/16/05 | RSK-175 | STL | – | – | – | < 2 | – | 1 | µg/L | | |
| H2-Trip Blank | 9/14/05 | Vapor | TB | 9/21/05 | 215.1 | MicroSeeps | – | – | – | – | ND | 1 | nM | | |
| January–February 2006 Monitoring Well Installation | | | | | | | | | | | | | | | |
| MRQCD-W-16548 | 2/1/06 | Water | FB | 2/2/06 | 524.2 | AGEM | ND | ND | ND | – | – | 1 | µg/L | | |
| EVTB3-W-13226 | 2/1/06 | Water | TB | 2/2/06 | 524.2 | AGEM | ND | ND | ND | – | – | 1 | µg/L | | |
| MRCM-G-16553 | 2/14/06 | Water | BT | 2/15/06 | 524.2 | AGEM | ND | 0.2 J | ND | – | – | 1 | µg/L | | |
| MR10S-G-16552 | 2/14/06 | Water | BT | 2/15/06 | 524.2 | AGEM | 0 | 0 | 0 | – | – | 1 | µg/L | | |
| MR11S-G-16550 | 2/14/06 | Water | BT | 2/15/06 | 524.2 | AGEM | 15 | 0.4 J | 0 | – | – | 1 | µg/L | | |
| MR09S-G-16549 | 2/14/06 | Water | BT | 2/15/06 | 524.2 | AGEM | 0 | 0 | 0 | – | – | 1 | µg/L | | |
| EVFB-W-13239 | 2/14/06 | Water | TB | 2/15/06 | 524.2 | AGEM | ND | ND | ND | – | – | 1 | µg/L | | |
| March 2006 Sampling Event | | | | | | | | | | | | | | | |
| MRQCWB-W-19997 | 3/20/06 | Water | TB | 3/22/06 | 524.2 | AGEM | ND | ND | ND | – | – | 1 | µg/L | | |
| MRQCWB-W-19998 | 3/20/06 | Water | TB | 3/21/06 | RSK-175 | STL | – | – | – | < 2 | – | 1 | µg/L | | |
| MRQCWB-W-20011 | 3/21/06 | Water | TB | 3/22/06 | 524.2 | AGEM | ND | ND | ND | – | – | 1 | µg/L | | |
| MRQCWB-W-20010 | 3/21/06 | Water | TB | 3/22/06 | RSK-175 | STL | – | – | – | < 2 | – | 1 | µg/L | | |
| MRQCRI-W-19995 | 3/22/06 | Water | RI | 3/23/06 | 524.2 | AGEM | ND | ND | ND | – | – | 1 | µg/L | | |
| MRQCTB-W-20013 | 3/22/06 | Water | TB | 3/23/06 | 524.2 | AGEM | ND | ND | ND | – | – | 1 | µg/L | | |
| MRQCWB-W-20007 | 3/22/06 | Water | TB | 3/26/06 | 8260 | ESIC | ND | ND | 1.7 J B ^f | – | – | 1 | µg/L | | |
| MRQCTB-W-20009 | 3/22/06 | Water | TB | 3/24/06 | RSK-175 | STL | – | – | – | < 2 | – | 1 | µg/L | | |

TABLE S3.2 (Cont.)

| Sample | Sample Date | Medium | Type ^a | Analysis Date | Method ^b | Laboratory | Concentration (units as specified) | | | | | | Units |
|-----------------------------------|-------------|--------|-------------------|---------------|---------------------|------------|------------------------------------|------------|--------------------|---------|--------------------|--------------------|-------|
| | | | | | | | Carbon Tetrachloride | Chloroform | Methylene Chloride | Methane | Dissolved Hydrogen | Quantitation Limit | |
| March 2006 Sampling Event (cont.) | | | | | | | | | | | | | |
| MRQCTB-W-20012 | 3/22/06 | Water | TB | 3/24/06 | RSK-175 | STL | — | — | — | < 2 | — | 1 | µg/L |
| MRQCDR-W-20020 | 3/23/06 | Water | BT | 3/24/06 | 524.2 | AGEM | 21 | 0.8 J | ND | — | — | 1 | µg/L |
| MRQCRI-W-20019 | 3/23/06 | Water | RI | 3/24/06 | 524.2 | AGEM | ND | ND | ND | — | — | 1 | µg/L |
| EVQCTB-W-20105 | 3/23/06 | Water | TB | 3/24/06 | 524.2 | AGEM | ND | ND | ND | — | — | 1 | µg/L |
| EVQCTB-W-26120 | 3/23/06 | Water | TB | 3/27/06 | 8260 | ESIC | ND | ND | 1.8 J B | — | — | 1 | µg/L |
| MRQCTB-W-20017 | 3/23/06 | Water | TB | 3/24/06 | RSK-175 | STL | — | — | — | < 2 | — | 1 | µg/L |

^a Sample types: BT, waste characterization; FB, field blank; RI, rinsate; TB, trip blank.

^b Analytical methods: EPA Method 524.2 (EPA 1995); EPA Method 8260B (EPA 1998b); RSK-175 (Kampbell and Vandegrift 1998).

^c ND, not detected at the method detection limit.

^d Qualifier J indicates an estimated concentration below the indicated quantitation limit.

^e Sample not analyzed for this constituent.

^f Qualifier B indicates that the analyte was found in the associated method blank.

TABLE S3.3 Results for quality control procedures monitoring organic analyses of water samples at the AGEM Laboratory by the purge-and-trap method.

| Sample | Recovery of Surrogate Compounds ^a (%) | | Measured Concentration and RPD Value for Calibration Check Standard | | | |
|---|--|-------------------------------|---|------------------|--------------------|------------------|
| | Fluorobenzene | Bromo-1,4-Dichloro-benzene-d4 | Carbon Tetrachloride | | Methylene Chloride | |
| | | | (µg/L) | RPD ^b | (µg/L) | RPD ^b |
| SDG 05-9-14, Analysis Date September 14, 2005 | | | | | | |
| 20-µg/L standard | 107 | 112 | 17.63 | 3.1 | 18.81 | 1.5 |
| Laboratory blank | 100 | 100 | | | 20.06 | 0.1 |
| MRMW7S-W-19258 | 91 | 97 | | | | |
| MRMW5S-W-19260 | 103 | 115 | | | | |
| MRMW1D-W-16518 | 107 | 117 | | | | |
| MRMW1S-W-19259 | 98 | 105 | | | | |
| MRMW1S-W-19259DUP | 108 | 114 | | | | |
| MRQCTB-W-16519 | 90 | 97 | | | | |
| SDG 05-9-15, Analysis Date September 15, 2005 | | | | | | |
| 20-µg/L standard | 114 | 116 | 22.5 | 2.9 | 23.38 | 3.9 |
| Laboratory blank | 100 | 100 | | | 25.42 | 6.0 |
| MRQCDU-W-16521 | 100 | 99 | | | | |
| MRMW6S-W-19263 | 110 | 111 | | | | |
| MRMW2S-W-19264 | 104 | 104 | | | | |
| MRMW4S-W-19262 | 99 | 100 | | | | |
| MRMW3S-W-19261 | 108 | 109 | | | | |
| MRMW3S-W-19261DUP | 89 | 91 | | | | |
| MRQCTB-W-16522 | 90 | 90 | | | | |
| SDG 05-9-16, Analysis Date September 16, 2005 | | | | | | |
| 20-µg/L standard | 104 | 106 | 20.74 | 0.9 | 21.69 | 2.0 |
| Laboratory blank | 113 | 114 | | | 23.37 | 3.9 |
| MRPRILL-W-16512 | 113 | 110 | | | | |
| MRQCWADR-W-16510 | 104 | 113 | | | | |

| Recovery of Surrogate Compounds ^a (%) | | | | | | Measured Concentration and RPD Value for Calibration Check Standard | | | | | |
|--|---------------|----------------|--------------------------|-----|--|---|------------------|------------|------------------|--------------------|------------------|
| Sample | Fluorobenzene | Bromo- benzene | 1,4-Dichloro- benzene-d4 | | | Carbon Tetrachloride | | Chloroform | | Methylene Chloride | |
| | | | | | | (µg/L) | RPD ^b | (µg/L) | RPD ^b | (µg/L) | RPD ^b |
| <i>SDG 05-9-16, Analysis Date September 16, 2005 (cont.)</i> | | | | | | | | | | | |
| MRPRISCH-W-16513 | | 101 | | 104 | | | | | | | |
| MIRMW8S-W-19265 | | 103 | | 107 | | | | | | | |
| MRPRSTON-W-16511 | | 101 | | 101 | | | | | | | |
| MRPRSTON-W-16511DUP | | 101 | | 100 | | | | | | | |
| MRQCRI-W-16525 | | 97 | | 97 | | | | | | | |
| MRQCRI-W-16524 | | 95 | | 94 | | | | | | | |
| MRQCTB-W-16526 | | 87 | | 86 | | | | | | | |
| <i>SDG 06-2-2, Analysis Date February 2, 2006</i> | | | | | | | | | | | |
| 20-µg/L standard | | 85 | | 95 | | 16.54 | 4.7 | 19.66 | 0.4 | 22.71 | 3.2 |
| Laboratory blank | | 100 | | 100 | | | | | | | |
| MRQCD-W-16548 | | 93 | | 92 | | | | | | | |
| EVTB3-W-13226 | | 88 | | 88 | | | | | | | |
| <i>SDG 06-2-15, Analysis Date February 15, 2006</i> | | | | | | | | | | | |
| 20-µg/L standard | | 88 | | 89 | | 19.6 | 0.5 | 21.73 | 2.1 | 29.97 | 10.0 |
| Laboratory blank | | 108 | | 108 | | | | | | | |
| EVFB-W-13239 | | 101 | | 101 | | | | | | | |
| MR09S-G-16549 | | 87 | | 87 | | | | | | | |
| MR11S-G-16550 | | 86 | | 91 | | | | | | | |
| MR11S-G-16551 | | 97 | | 95 | | | | | | | |
| MR10S-G-16552 | | 87 | | 88 | | | | | | | |
| MRCM-G-16553 | | 101 | | 96 | | | | | | | |

TABLE S3.3 (Cont.)

| Sample | Recovery of Surrogate Compounds ^a (%) | | Measured Concentration and RPD Value for Calibration Check Standard | | | | | |
|--|--|---|---|------------------|------------|------------------|--------------------|------------------|
| | Fluorobenzene | Bromo-1,4-Dichloro- fluorobenzene benzene-d4 | Carbon Tetrachloride | | Chloroform | | Methylene Chloride | |
| | | | (µg/L) | RPD ^b | (µg/L) | RPD ^b | (µg/L) | RPD ^b |
| SDG 06-3-21 Analysis Date March 21, 2006 | | | | | | | | |
| 20-µg/L standard | 92 | 112 | 18.48 | 2.0 | 17.69 | 3.1 | 18.3 | 2.2 |
| Laboratory blank | 100 | 100 | | | | | | |
| MRRILINGER-W-19988 | 115 | 107 | | | | | | |
| MRMW6S-W-19990 | 109 | 105 | | | | | | |
| MRSTONE-W-19987 | 108 | 101 | | | | | | |
| MRMW8S-W-19991 | 107 | 96 | | | | | | |
| MRMW8S-W-19991DUP | 101 | 95 | | | | | | |
| MRMW1D-W-19986 | 101 | 99 | | | | | | |
| MRQCFB-W-19997 | 81 | 78 ^c | Reanalyzed in SDG 06-3-22. | | | | | |
| SDG 06-3-22 Analysis Date March 22, 2006 | | | | | | | | |
| 20-µg/L standard | 100 | 102 | 16.98 | 4.1 | 22.68 | 3.1 | 18.3 | 2.2 |
| Laboratory blank | 100 | 100 | | | | | | |
| MRMW2S-W-19992 | 114 | 116 | | | | | | |
| MRMW2S-W-19992DUP | 112 | 115 | | | | | | |
| MRMW4S-W-19993 | 112 | 118 | | | | | | |
| MRMW10S-W-19999 | 96 | 99 | | | | | | |
| MRQCFB-W-20011 | 109 | 110 | | | | | | |
| MRQCFB-W-19997 | 95 | 99 | | | | | | |
| SDG 06-3-23 Analysis Date March 23, 2006 | | | | | | | | |
| 20-µg/L standard | 87 | 90 | 19.36 | 0.8 | 20.97 | 1.2 | 18.3 | 2.2 |
| Laboratory blank | 114 | 115 | | | | | | |
| MRMW7S-W-20000 | 108 | 112 | | | | | | |
| MRQCDU-W-20002 | 100 | 101 | | | | | | |
| MRMW11S-W-20001 | 109 | 111 | | | | | | |

TABLE S3.3 (Cont.)

| Sample | Recovery of Surrogate Compounds ^a (%) | | Measured Concentration and RPD Value for Calibration Check Standard | | | |
|--|--|---------------------------|---|------------------|------------|------------------|
| | | | Carbon Tetrachloride | | Chloroform | |
| | Fluorobenzene | Bromo-1,4-Dichlorobenzene | (µg/L) | RPD ^b | (µg/L) | RPD ^b |
| SDG 06-3-23 Analysis Date March 23, 2006 (cont.) | | | | | | |
| MRQCTB-W-20013 | 87 | 89 | | | | |
| MRMW5S-W-19996 | 98 | 98 | | | | |
| MRMW9S-W-20004 | 88 | 87 | | | | |
| MRQCRI-W-19995 | 95 | 94 | | | | |
| MRMW1S-W-20008 | 93 | 94 | | | | |
| SDG 06-3-24 Analysis Date March 24, 2006 | | | | | | |
| 20-µg/L standard | 104 | 104 | 18.44 | 2.0 | 21.3 | 1.6 |
| Laboratory blank | 100 | 100 | | | | |
| MRISCH-W-19989 | 98 | 100 | | | | |
| MRQCDU-W-20014 | 99 | 102 | | | | |
| MRMW3S-W-19994 | 102 | 105 | | | | |
| MRMW3S-W-19994DUP | 103 | 105 | | | | |
| MRQCDR-W-20020 | 96 | 97 | | | | |
| MRQCRI-W-20019 | 93 | 94 | | | | |
| EVQCTB-W-20105 | 92 | 93 | | | | |

^a Quality control range for surrogate recovery = 80–120%.

^b Quality control range for RPD = ±20%.

^c Surrogate recovery outside quality control range.

TABLE S3.4 Comparison of primary and secondary analyses of groundwater samples at the AGEM Laboratory during monitoring at Morrill, Kansas.

| | | Concentration (µg/L) | | | | | | | | | | | | | | |
|----------|--------------------------|-----------------------|-------------|--------------------|-----------------------|-------------|--------------------|-----------------------|-------------|--------------------|-----------------------|-------------|--------------------|-----------------------------|-------------|--------------------|
| | | Sample | | | | Replicate | | | | Replicate | | | | Relative Percent Difference | | |
| Location | Sample Type ^a | Carbon Tetra-chloride | Chloro-form | Methylene Chloride | Carbon Tetra-chloride | Chloro-form | Methylene Chloride | Carbon Tetra-chloride | Chloro-form | Methylene Chloride | Carbon Tetra-chloride | Chloro-form | Methylene Chloride | Carbon Tetra-chloride | Chloro-form | Methylene Chloride |
| MW3S | MW | | | | MRQCDU-W-16521 | 101 | 3.2 | ND ^b | 108 | 3.4 | ND | 6.7 | 6.1 | — ^c | | |
| MW11S | BT | | | | MR11S-G-16551 | 15 | 0.4 J ^d | ND | 26 | 0.6 J | ND | 53.7 | 40.0 | — | | |
| MW11S | MW | | | | MRQCDU-W-20002 | 39 | 0.9 J | ND | 37 | 0.9 J | ND | 5.3 | 0 | — | | |
| MW3S | MW | | | | MRQCDU-W-20014 | 91 | 2.6 | ND | 91 | 2.5 | ND | 0 | 3.9 | — | | |

^a Sample types: BT, waste characterization; MW, monitoring well.

^b ND, contaminant not detected at an instrument detection limit of 0.1 µg/L.

^c RPD not calculated; analyte not detected.

^d Qualifier J indicates an estimated concentration below the method quantitation limit of 1.0 µg/L.

TABLE S3.5 Recovery of system-monitoring compounds in verification organic analyses of water samples by ENVSY.

| Sample | Analysis Date | SDG | Recovery ^a (%) | | |
|-------------------|---------------|---------|---------------------------|-------------------------|--|
| | | | Toluene-d ₈ | Bromofluoro- benzene | 1,2-Dichloro- ethane-d ₄ |
| VLKHP | 3/26/06 | 0605045 | 102 | 92 | 98 |
| MRQCMW11S-W-20006 | 3/26/06 | 0605045 | 104 | 94 | 102 |
| MRQCFB-W-20007 | 3/26/06 | 0605045 | 102 | 92 | 102 |
| MRMW3S-W-19994 | 3/26/06 | 0605045 | 102 | 90 | 100 |
| VLKHQ | 3/27/06 | 0605045 | 100 | 90 | 98 |
| VLKHY | 3/27/06 | 0605045 | 100 | 92 | 102 |
| EVQCTB-W-26120 | 3/27/06 | 0605045 | 100 | 90 | 102 |
| VHBLKHY | 3/27/06 | 0605045 | 100 | 92 | 104 |

^a Quality control ranges:

| <u>Compound</u> | <u>Recovery (%)</u> |
|-----------------------------------|---------------------|
| Toluene-d ₈ | 88–110 |
| Bromofluorobenzene | 86–115 |
| 1,2-Dichloroethane-d ₄ | 76–114 |

TABLE S3.6 Comparison of organic results for verification analyses by ENVSY during monitoring at Morrill, Kansas.

| Location | AGEM Laboratory Sample | ENVSY Sample | Concentration (µg/L) | | | | | | Relative Percent Difference | | |
|----------|------------------------|-------------------|-----------------------|-------------|--------------------|-----------------------|--------------------|----------------------|-----------------------------|------|----------------|
| | | | AGEM Laboratory | | | ENVSY | | | | | |
| | | | Carbon Tetra-chloride | Chloro-form | Methylene Chloride | Carbon Tetra-chloride | Chloro-form | Methylene Chloride | | | |
| MW3S | MRMW3S-W-19994 | MRMW3S-W-19994 | 91 | 2.6 | ND ^a | 62 | 2.1 J ^b | 1.6 J B ^c | 37.9 | 21.3 | — ^d |
| MW11S | MRMW11S-W-20001 | MRQCMW11S-W-20006 | 39 | 0.9 J | ND | 30 | ND | 1.6 J B | 26.0 | — | — |

^a ND, contaminant not detected.

^b Qualifier J indicates an estimated concentration below the method quantitation limits of 1.0 µg/L for purge-and-trap analysis at the AGEM Laboratory or 5.0 µg/L for CLP analysis by ENVSY.

^c Qualifier B indicates that methylene chloride was present in the laboratory blank associated with the sample analysis.

^d RPD not calculated.

TABLE S3.7 Recovery of known analyte concentrations achieved during inorganic and attenuation parameter analyses of laboratory quality control samples by STL.

| Compound | Recovery ^a (%) in SDG | | | | | | |
|----------------------|----------------------------------|--------|-----------------|---------|--------|--------|--------|
| | 109662 | 109677 | 109712 | 113239 | 113257 | 113285 | 113321 |
| Alkalinity | 107 | 107 | 107 | 108 | 108 | 108 | 108 |
| Nitrate | 91-95 | 93-97 | 97 | 99 | 89-97 | 89-91 | 96 |
| Phosphate | 90 | 89 | 93 | 97-102 | 86 | 93 | 100 |
| Sulfate | 98 | 97-101 | 97 | 100-109 | 99 | 101 | 99 |
| Chloride | 93-96 | 93-99 | 96 | 100 | 104 | 93 | 96 |
| Nitrate/Nitrite N | 90 | 90-94 | 97 | 97-98 | 95-98 | 94-97 | 94 |
| Nitrite Nitrogen | 96 | 96 | 93 | 99 | 99 | 92 | 90 |
| Sulfide | 97 | 100 | 100 | 92 | 92 | 90-92 | 90 |
| Aluminum | 105.2 | 97.6 | NA ^b | 94.7 | 94.7 | 97.2 | 107.1 |
| Calcium | 105.2 | 104 | NA | 94.2 | 94.2 | 96.9 | 99 |
| Iron | 99.2 | 103.4 | NA | 91.2 | 91.2 | 96.2 | 95.3 |
| Magnesium | 105.7 | 104.8 | NA | 95 | 95 | 97 | 99.1 |
| Manganese | 105.6 | 105.5 | NA | 90.6 | 90.6 | 88.9 | 92.6 |
| Phosphorus | 103.9 | 106.6 | NA | 90.9 | 90.9 | 87.7 | 92.1 |
| Potassium | 97.3 | 94.1 | NA | 95.3 | 95.3 | 91 | 101.4 |
| Silicon | 101.2 | 98.9 | NA | 106.4 | 106.4 | 103.8 | 108.8 |
| Sodium | 108.1 | 103.1 | NA | 95.3 | 95.3 | 94.4 | 99.6 |
| Zinc | 100.7 | 102.1 | NA | 100.9 | 100.9 | 87.3 | 90.9 |
| Total Organic Carbon | 106 | 106 | 100 | 96 | 97 | 96 | 97 |
| Methane | 103 | 104 | 104 | 114 | 122 | 122 | 86 |
| Ethane | 93 | 100 | 100 | 114 | 121 | 121 | 100 |
| Ethene | 92 | 100 | 100 | 115 | 123 | 123 | 100 |

^a Quality control ranges:

| Parameters | Recovery (%) |
|-------------|--------------|
| Inorganic | 85–115 |
| Attenuation | 70–130 |

^b NA, samples in this SDG were not analyzed for the indicated parameter.

TABLE S3.8 Relative percent difference values for inorganic and attenuation parameter analyses of samples and replicates by STL.

| | Concentration (µg/L) | | Concentration (µg/L) | |
|--------------------------|---------------------------|-----------------------------|--------------------------|-----------------------------|
| | Sample MRMW11S-W-20001 | Replicate MRQCDU-W-20005 | Sample MRMW3S-W-19994 | Replicate MRQCDU-W-20016 |
| Alkalinity | 316000 | 316000 | 287000 | 286000 |
| Aluminum | < 200 | < 200 | < 200 | < 200 |
| Calcium | 90500 | 96400 | 90500 | 91800 |
| Chloride | 8220 | 8310 | 3850 | 3870 |
| Ethane | < 4 | < 4 | < 4 | < 4 |
| Ethene | < 3 | < 3 | < 3 | < 3 |
| Hydrogen | NA | NA | NA | NA |
| Magnesium | 30500 | 32400 | 15500 | 15800 |
| Manganese | < 15 | < 15 | < 15 | < 15 |
| Methane | < 2 | < 2 | < 2 | < 2 |
| Nitrate | 21800 | 21600 | 15200 | 15400 |
| Nitrite Nitrogen | 5.2 | 6.1 | < 5 | < 5 |
| Nitrate/Nitrite Nitrogen | 20300 | 20400 | 13400 | 13800 |
| Phosphate | < 200 | < 200 | < 200 | < 200 |
| Phosphorus | < 250 | < 250 | < 250 | < 250 |
| Potassium | < 5000 | < 5000 | < 5000 | < 5000 |
| Silicon | 7480 | 7450 | 7270 | 7310 |
| Sodium | 22600 | 24000 | 20100 | 20400 |
| Sulfate | 25200 | 25200 | 22800 | 22700 |
| Sulfide | < 20 | < 20 | < 20 | < 20 |
| Total Organic Carbon | 2190 | 1880 | 1950 | 1510 |
| Zinc | < 20 | < 20 | < 20 | < 20 |

^a RPD not calculated.

Supplement 4:

Chain-of-Custody Forms and Outside Laboratory Data

Supplement 4 Contents

| | |
|---------------------------------|------------|
| COC Forms AGEM Laboratory | 3 of 205 |
| COC Forms STL | 13 of 205 |
| COC Forms ENVSY | 21 of 205 |
| COC Form Microseeps..... | 23 of 205 |
| STL SDG 109662..... | 24 of 205 |
| STL SDG 109677..... | 45 of 205 |
| STL SDG 109712..... | 71 of 205 |
| STL SDG 113239..... | 85 of 205 |
| STL SDG 113257..... | 102 of 205 |
| STL SDG 113285..... | 123 of 205 |
| STL SDG 113321..... | 159 of 205 |
| ENVSY SDG 0605045..... | 176 of 205 |
| Microseeps SDG P0509252 | 197 of 205 |

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

| MATRIX: WATER | | ARGONNE NATIONAL LABORATORY | | | | Shipping Container No. | |
|--|----------------|---|-------|----------------------------|-----------------------------|---|--|
| RECEIVING LAB: EVS / AGEM | | CHAIN OF CUSTODY RECORD* | | | | Shipping Info: | |
| PROJECT/SITE: EVEREST MONITORING | | | | | | ANL Field Contact (Name & Temporary Phone): | |
| SAMPLER(S) (Signature) Bob Seeliny | | | | | | 402-429-5144 | |
| DATE OF COLLECTION | | SAMPLE ID NUMBER(S) | | Number of containers | | ANALYSIS | |
| | | | | | | REMARKS | |
| 3/23/06 | EV5B72-W-20100 | 6 | | | | | TO BE PACKED ALONG WITH OTHER SAMPLES COLLECTED BY DARYL/JOEL TRAVIS |
| | EV5B72-W-20101 | 6 | | | | | |
| | EV5B18-W-20102 | 6 | | | | | |
| | EVMMW-W-20103 | 6 | | | | | |
| | EVQCBB-W-20104 | 1 | | | | | |
| | EVQCTB-W-20105 | 1 | | | | | |
| | EV5B01-W-20106 | 6 | | | | | TRIP BLANK |
| _____ | | | | | | | |
| Relinquished by (Signature) Bob Seeliny | | Date | Time | Received by (Signature) | Relinquished by (Signature) | Date | Time |
| Relinquished by (Signature) | | Date | Time | Received for Laboratory by | Date | Time | Remarks |
| | | 3/23/06 | 18:15 | Jay Calhoun | 3/24/06 | 9:45am | T=40C |
| Y | N | FOR LAB USE ONLY | | | | | |
| | | Custody seal was intact when shipment received. | | | | | |
| | | Sample containers were intact when received. | | | | | |
| | | Shipment was at required temperature when received. | | | | | |
| | | Sample labels, Tags and COC agree. | | | | | |
| Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439 | | | | | | | |

| MATRIX: | | WATER | | Shipping Container No. 831434979123 | |
|--|-----------------|--|---------|---|------|
| RECEIVING LAB: | | Seventrent | | Shipping Info: Feder | |
| PROJECT/SITE: | | MORRILL | | ANL Field Contact (Name & Temporary Phone): BARNEY NAS 406 | |
| SAMPLER(S) (Signature) | | B. W. Nashold | | ANL Field Contact (Name & Temporary Phone): BARNEY NAS 406 | |
| DATE OF COLLECTION | | SAMPLE ID NUMBER(S) | | REMARKS | |
| 12 SEP 05 | MRMW075-W-19258 | 8 | 1 | (1750 HR) | |
| 13 SEP 05 | MRMW15-W-19259 | 8 | 1 | (1000 HR) | |
| 13 SEP 05 | MRMW55-W-19260 | 8 | 1 | (1220 HR) | |
| 13 SEP 05 | MRQ075-W-16520 | 2 | 1 | | |
| | | | | TOC and | |
| | | | | Total N added to pH 2/H ₂ O ₂ | |
| | | | | Sulfide preserved by zinc | |
| | | | | acetate & pH 7.9/sodium | |
| | | | | hydroxide. | |
| | | | | ANAL sample time sensitivity | |
| | | | | because of nitrate analysis | |
| Relinquished by (Signature) | | Date | Time | Relinquished by (Signature) | Date |
| B. W. Nashold | | 13 SEP 05 | 1300 HR | | |
| Relinquished by (Signature) | | Date | Time | Relinquished by (Signature) | Date |
| | | | | | |
| FOR LAB USE ONLY | | *A sample is under custody if: | | | |
| Y | N | 1. It is in your possession; or, | | | |
| X | | 2. It is in your view, after having been in your possession; or, | | | |
| X | | 3. It was in your possession and you locked it up; or, | | | |
| X | | 4. It is in a designated secure area. | | | |
| Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439 | | | | | |

| MATRIX: WATER | | ARGONNE NATIONAL LABORATORY CHAIN OF CUSTODY RECORD* | | Shipping Container No. Silver Maxi | |
|--|-----------------|--|---|--|---|
| RECEIVING LAB: Sevea Treat | | | | Shipping Info: 8314 34979145 | |
| PROJECT/SITE: Morris | | | | ANL Field Contact (Name & Temporary Phone): 8 John Taylor 630 379 5543 | |
| SAMPLER(S) (Signature): [Signature] | | ANALYSIS | | REMARKS | |
| DATE OF COLLECTION | | SAMPLE ID NUMBER(S) | | | |
| 14 SEP 05 | MR MW65-W-19263 | 8 | 1 | 1 | 1 |
| 13 SEP 05 | MR MW35-W-19261 | 8 | 1 | 1 | 1 |
| 14 SEP 05 | MR QCT6-W-16523 | 8 | 1 | 1 | 1 |
| 14 SEP 05 | MR MW25-W-19264 | 8 | 1 | 1 | 1 |
| 14 SEP 05 | MR MW45-W-19262 | 8 | 1 | 1 | 1 |
| TOL-TN sample for acidified pH < 2 H ₂ SO ₄ | | | | | |
| Suicide pH > 9 ALKOH Zn acetate | | | | | |
| Anion sample Time sensitive due to nitrate analysis | | | | | |
| Relinquished by (Signature) [Signature] | | Received by (Signature) [Signature] | | Date | |
| Date 14 SEP 05 | | Time 1300 HR | | Received by (Signature) | |
| Relinquished by (Signature) [Signature] | | Received for Laboratory by [Signature] | | Date | |
| Date | | Time | | Remarks | |
| *A sample is under custody if: | | | | | |
| 1. It is in your possession; or, | | | | | |
| 2. It is in your view, after having been in your possession; or, | | | | | |
| 3. It was in your possession and you locked it up; or, | | | | | |
| 4. It is in a designated secure area. | | | | | |
| FOR LAB USE ONLY | | | | | |
| Y | N | Custody seal was intact when shipment received. | | | |
| X | | Sample containers were intact when received. | | | |
| X | | Shipment was at required temperature when received. | | | |
| X | | Sample labels, Tags and COC agree. | | | |
| Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439 | | | | | |

[illegible]

4516

| MATRIX: WATER | | ARGONNE NATIONAL LABORATORY | | Shipping Container No. | |
|--|---------------------|--|----------|--|----------|
| RECEIVING LAB: SEVERN-TRENT | | CHAIN OF CUSTODY RECORD* | | Shipping Info: | |
| PROJECT/SITE: MORRILL, KS | | | | ANL Field Contact (Name & Temporary Phone): | |
| SAMPLE(S) (Signature) <i>Dr. C. G. Gable</i> | | | | DARYL BIERG 402/416-7255 | |
| DATE OF COLLECTION | SAMPLE ID NUMBER(S) | Number of containers | ANALYSIS | | |
| | | | TOC | METHANE | ANALYSIS |
| 20 MAR 06 | MR-MW-65-W-19990 | 8 | ✓ | ✓ | ✓ |
| 20 MAR 06 | MR-MW-83-W-19991 | 8 | ✓ | ✓ | ✓ |
| 20 MAR 06 | MR-QCFB-W-19998 | 2 | ✓ | ✓ | ✓ |
| <div> <div>Relinquished by (Signature)</div> <div>Received by (Signature)</div> </div> | | | | | |
| <div> <div>Relinquished by (Signature)</div> <div>Received for Laboratory by</div> </div> | | <div> <div>Date</div> <div>Time</div> </div> | | <div> <div>Date</div> <div>Time</div> </div> | |
| <div> <div>Relinquished by (Signature)</div> <div>Received for Laboratory by</div> </div> | | <div> <div>Date</div> <div>Time</div> </div> | | <div> <div>Date</div> <div>Time</div> </div> | |
| <div> <div>FOR LAB USE ONLY</div> <div> <div>Y</div> <div>N</div> </div> <div> <div>Custody seal was intact when shipment received.</div> <div>Sample containers were intact when received.</div> <div>Shipment was at required temperature when received.</div> <div>Sample labels, Tags and COC agree.</div> </div> </div> | | | | | |
| <div> <div>ARGONNE NATIONAL LABORATORY</div> <div>Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439</div> </div> | | | | | |

4211

[illegible]

4212

[illegible]

3772

| MATRIX: WATER | | | ARGONNE NATIONAL LABORATORY | | | Shipping Container No. | | |
|-------------------------------|------------------|---|-----------------------------|---|---|---|---|---|
| RECEIVING LAB: SEVERN - TRENT | | | CHAIN OF CUSTODY RECORD* | | | Shipping Info: | | |
| PROJECT/SITE: MORELL, KS | | | ANALYSIS | | | ANL Field Contact (Name & Temporary Phone): | | |
| SAMPLER(S) (Signature) | | | Number of containers | | | PARUL BERS 402/46-7255 | | |
| DATE OF COLLECTION | | | SAMPLE ID NUMBER(S) | | | REMARKS | | |
| 22 MAR 06 | MR QC DU W 2000S | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 22 MAR 06 | MEMWISW 2000B | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 22 MAR 06 | MR QC TS W 2001Z | 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| / | | | | | | | | |
| Relinquished by (Signature) | | | Received by (Signature) | | | Received by (Signature) | | |
| JRC. C. C. C. | | | 22/03/06 1930 | | | Date | | |
| Relinquished by (Signature) | | | Received for Laboratory by | | | Remarks | | |
| JRC. C. C. C. | | | 323-26 0945 | | | Time | | |
| FOR LAB USE ONLY | | | Date | | | Time | | |
| Y | N | Custody seal was intact when shipment received. | | | | | | |
| X | | Sample containers were intact when received. | | | | | | |
| X | | Shipment was at required temperature when received. | | | | | | |
| X | | Sample labels, Tags and COC agree. | | | | | | |

377.7

[illegible]

3770

[illegible]

Temp 2°C cooler

CHAIN - OF - CUSTODY RECORD

Fax No. : (412) 826-3433

Results to : Serge
Alvarado
(630 252 5767)

Invoice to : _____
per contract

5005

[illegible]

| Relinquished by : | Company : | Date : | Time : | Received by : | Company : | Date : | Time : |
|-------------------|-----------|-----------|---------|---------------|-----------|-----------|---------|
| BW Marhold | ANL | 13 Feb 56 | 1100 HR | W. H. C. | ANL | 13 Feb 56 | 1100 HR |
| Relinquished by : | Company : | Date : | Time : | Received by : | Company : | Date : | Time : |
| Relinquished by : | Company : | Date : | Time : | Received by : | Company : | Date : | Time : |

WHITE COPY : Accompany Samples

YELLOW COPY : Laboratory File

PINK COPY : Submitter

November 15, 2005

Mr. Clyde Dennis
Argonne National Laboratory
9700 S. Cass Avenue
Bldg. 203, Office B149
Argonne, IL 60439

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

Re: Laboratory Project No. 21005
Case: MORRILL; SDG: 109662

Dear Mr. Dennis:

Enclosed are analytical results for samples that were received by STL Burlington on September 14th, 2005. This report is sequentially numbered starting with page 1 and ending with page 82. Laboratory identification numbers were assigned, and designated as follows:

| <u>Lab ID</u> | <u>Client Sample ID</u> | <u>Sample Date</u> | <u>Sample Matrix</u> |
|-----------------------------------|-----------------------------|------------------------|--------------------------|
| Received: 09/14/05 ETR No: 109662 | | | |
| 637482 | MRMW07S-W-19258 | 09/12/05 | Water |
| 637483 | MRMW1S-W-19259 | 09/13/05 | Water |
| 637484 | MRMW5S-W-19260 | 09/13/05 | Water |
| 637485 | MRQCTB-W-16520 | 09/13/05 | Water |
| 637486 | MRMW07S-W-19258F | 09/12/05 | Filtrate |
| 637487 | MRMW1S-W-19259F | 09/13/05 | Filtrate |
| 637488 | MRMW5S-W-19260F | 09/13/05 | Filtrate |

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal. The analytical work for nitrate nitrogen and ortho-phosphate occurred after the 48-hour holding time specified by Method 300.0. The analytical work for nitrite nitrogen was performed within the 48-hour holding time specified by Method 354.1.

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes, although, for the ion chromatography analysis, the instrumentation has within it a pretreatment system that does provide filtration as a function of routine operation.

The primary analysis of the samples for nitrate nitrogen was performed in the context of USEPA Method 353.2, using preserved sample volumes. Secondly, results for nitrate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit. This is reflected in the positive results in the analysis of the method blanks and in the analysis of performance blanks.

The primary analysis of the samples for phosphorus was performed in the context of SW846 Method 3010A/6010B. Secondly, results for orthophosphate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that, for this parameter as well, there was an observed offset in the calibration associated with the ion chromatography analysis that had the potential to elevate results at or near the reporting limit. This is reflected in the positive results in the analysis of the method blank and in the analysis of performance blanks.

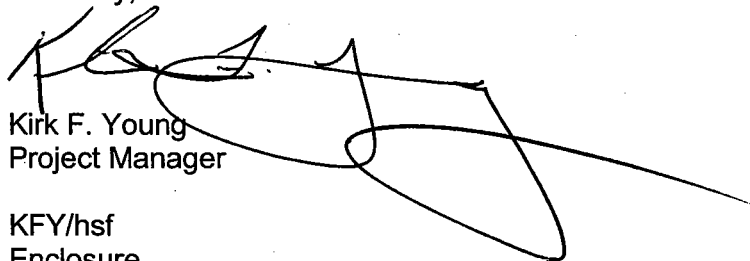
The samples were analyzed for total organic carbon by USEPA Method 415.1.

The samples were analyzed for methane, ethane, and ethene by Method RSK-175. Matrix spike and matrix spike duplicate analyses were not performed on samples in this sample set. A laboratory control sample was prepared and analyzed in association with the samples, and there was an acceptable recovery of the target analytes in that analysis. The method blank that was analyzed in association with the samples was free of contamination.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,



Kirk F. Young
Project Manager

KFY/hsf
Enclosure

STL Burlington Data Qualifier Definitions

Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- * Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

- P ICP-AES
MS ICP-MS
CV Cold Vapor AA
AS Semi-Automated Spectrophotometric

| MATRIX: WATER | | ARGONNE NATIONAL LABORATORY | | Shipping Container No. 831434979123 | |
|---|-----------------|--|--|---|-----------|
| RECEIVING LAB: Seven Trent | | CHAIN OF CUSTODY RECORD* | | Shipping Info: Feder | |
| PROJECT/SITE: Morris 11 | | | | ANL Field Contact (Name & Temporary Phone): BARREY NAS 402 | |
| SAMPLER(S) (Signature): <i>BW Nashold</i> | | ANALYSIS: | | REMARKS | |
| DATE OF COLLECTION | | SAMPLE ID NUMBER(S) | | | |
| | | Number of containers | | | |
| | | METHANE | | | |
| | | SULFIDE | | | |
| | | CATIONS | | | |
| | | TOTAL | | | |
| | | ANIONS | | | |
| | | ANALYSIS | | | |
| 12 SEP 05 | MRMW075-W-19258 | 8 | | | (1750 HR) |
| 13 SEP 05 | MRMW15-W-19259 | 8 | | | (1000 HR) |
| 13 SEP 05 | MRMW55-W-19260 | 8 | | | (1220 HR) |
| 13 SEP 05 | MRQCTB-W-16520 | 2 | | | |
| <i>BW Nashold</i> | | | | | |
| TOC and | | | | | |
| Total N and diff. to pH 2/H ₂ O ₂ | | | | | |
| Sulfide preserved by zinc | | | | | |
| acetate & pH > 9/sodium | | | | | |
| hydroxide. | | | | | |
| ANION sample time sensitive | | | | | |
| because of nitrate analysis | | | | | |
| Relinquished by (Signature): <i>BW Nashold</i> | | Received by (Signature): <i>BM Nashold</i> | | Date: 13 SEP 05 | |
| Time: 1300 HR | | Time: 1300 HR | | Date: 13 SEP 05 | |
| Relinquished by (Signature): | | Received for Laboratory by: | | Remarks: | |
| Time: | | Time: | | Date: | |
| Time: | | Time: | | Date: | |

*A sample is under custody if:

1. It is in your possession; or,
2. It is in your view, after having been in your possession; or,
3. It was in your possession and you locked it up; or,
4. It is in a designated secure area.

FOR LAB USE ONLY

Custody seal was intact when shipment received.

Sample containers were intact when received.

Shipment was at required temperature when received.

Sample labels, Tags and COC agree.

Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439

ER-160 (10-92)



**Sample Data Summary Package
For Wet Chemistry**

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW07S-W-19258

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109662

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 637482

Matrix: WATER

Client: ARGLAB

Date Received: 09/14/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 09/17/05 | BLKIC091705A | ug/L | 1 | 200 | 12000 | |
| 300.0 | Sulfate | 09/19/05 | BLKIC091905D | ug/L | 2 | 400 | 23300 | |
| 300.0 | Nitrate as N | 09/19/05 | BLKIC091905C | ug/L | 2 | 400 | 18000 | |
| 300.0 | O-Phosphate as P | 09/19/05 | BLKIC091905E | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 09/17/05 | BLKNN091705A | ug/L | 20 | 200 | 19800 | |
| 354.1 | Nitrite Nitrogen | 09/14/05 | BLKNI091405A | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 09/15/05 | BLKSL091505A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 09/16/05 | BLKTO091605C | ug/L | 1 | 1000 | 1000 | U |

Printed on: 11/11/05 01:27 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW1S-W-19259

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109662

Lab Code: STLV

Case No.: MORRILL

Lab Sample ID: 637483

Matrix: WATER

Client: ARGLAB

Date Received: 09/14/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 09/19/05 | BLKIC091905B | ug/L | 10 | 2000 | 85400 | |
| 300.0 | Sulfate | 09/19/05 | BLKIC091905D | ug/L | 10 | 2000 | 31100 | |
| 300.0 | Nitrate as N | 09/17/05 | BLKIC091705C | ug/L | 1 | 200 | 14200 | |
| 300.0 | O-Phosphate as P | 09/19/05 | BLKIC091905E | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 09/17/05 | BLKNN091705A | ug/L | 20 | 200 | 14500 | |
| 354.1 | Nitrite Nitrogen | 09/14/05 | BLKNI091405A | ug/L | 1 | 5.0 | 21.2 | |
| 376.2 | Sulfide | 09/15/05 | BLKSL091505A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 09/16/05 | BLKTO091605C | ug/L | 1 | 1000 | 1000 | U |

Printed on: 11/11/05 01:27 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW5S-W-19260

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109662

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 637484

Matrix: WATER

Client: ARGLAB

Date Received: 09/14/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 09/17/05 | BLKIC091705A | ug/L | 1 | 200 | 11400 | |
| 300.0 | Sulfate | 09/19/05 | BLKIC091905D | ug/L | 5 | 1000 | 41400 | |
| 300.0 | Nitrate as N | 09/19/05 | BLKIC091905C | ug/L | 5 | 1000 | 18300 | |
| 300.0 | O-Phosphate as P | 09/19/05 | BLKIC091905E | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 09/17/05 | BLKNN091705A | ug/L | 20 | 200 | 20900 | |
| 354.1 | Nitrite Nitrogen | 09/14/05 | BLKNI091405A | ug/L | 1 | 5.0 | 14.8 | |
| 376.2 | Sulfide | 09/15/05 | BLKSL091505A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 09/16/05 | BLKTO091605C | ug/L | 1 | 1000 | 1000 | U |

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW07S-W-19258F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109662

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 637486

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/14/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Total Alkalinity | 09/22/05 | BLKAL092205A | ug/L | 1 | 1000 | 303000 | |
| 310.1 | Bicarbonate Alkalinity | 09/22/05 | BLKAL092205B | ug/L | 1 | 1000 | 303000 | |
| 310.1 | Carbonate Alkalinity | 09/22/05 | BLKAL092205C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Hydroxide Alkalinity | 09/22/05 | BLKAL092205D | ug/L | 1 | 1000 | 1000 | U |

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW1S-W-19259F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109662

Lab Code: STLV

Case No.: MORRILL

Lab Sample ID: 637487

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/14/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Total Alkalinity | 09/22/05 | BLKAL092205A | ug/L | 1 | 1000 | 304000 | |
| 310.1 | Bicarbonate Alkalinity | 09/22/05 | BLKAL092205B | ug/L | 1 | 1000 | 304000 | |
| 310.1 | Carbonate Alkalinity | 09/22/05 | BLKAL092205C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Hydroxide Alkalinity | 09/22/05 | BLKAL092205D | ug/L | 1 | 1000 | 1000 | U |

Printed on: 11/11/05 01:27 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW5S-W-19260F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109662

Lab Code: STLV

Case No.: MORRILL

Lab Sample ID: 637488

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/14/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Total Alkalinity | 09/22/05 | BLKAL092205A | ug/L | 1 | 1000 | 292000 | |
| 310.1 | Bicarbonate Alkalinity | 09/22/05 | BLKAL092205B | ug/L | 1 | 1000 | 292000 | |
| 310.1 | Carbonate Alkalinity | 09/22/05 | BLKAL092205C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Hydroxide Alkalinity | 09/22/05 | BLKAL092205D | ug/L | 1 | 1000 | 1000 | U |



**Sample Data Summary Package
For Metals**

USEPA-CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 21005Lab Code: STLVT Case No.: 21005 SAS No.: _____ SDG No.: 109662

SOW No.: _____

EPA Sample No.

MRMW07S-W-19258FMRMW1S-W-19259FMRMW5S-W-19260F

Lab Sample ID.

637486637487637488

Were ICP interelement corrections applied?

Yes/No YES

Were ICP background corrections applied?

Yes/No YES

If yes-were raw data generated before

application of background corrections?

Yes/No NO

Comments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: _____

Date: _____

Title: _____

COVER PAGE - IN

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW07S-W-19258F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: 21005 SAS No.: _____ SDG No.: 109662
Matrix (soil/water): WATER Lab Sample ID: 637486
Level (low/med): LOW Date Received: 09/14/05
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 164 | B | | P |
| 7440-70-2 | Calcium | 105000 | | | P |
| 7439-89-6 | Iron | 142 | B | | P |
| 7439-95-4 | Magnesium | 22400 | | | P |
| 7439-96-5 | Manganese | 1.9 | U | | P |
| 7723-14-0 | Phosphorous | 26.6 | B | | P |
| 7440-09-7 | Potassium | 1340 | B | | P |
| 7440-21-3 | Silicon | 7530 | | | P |
| 7440-23-5 | Sodium | 26700 | | | P |
| 7440-66-6 | Zinc | 7.1 | B | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____
Comments: _____

Form I - IN

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW1S-W-19259F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: 21005 SAS No.: _____ SDG No.: 109662
Matrix (soil/water): WATER Lab Sample ID: 637487
Level (low/med): LOW Date Received: 09/14/05
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 54.6 | U | | P |
| 7440-70-2 | Calcium | 126000 | | | P |
| 7439-89-6 | Iron | 84.3 | U | | P |
| 7439-95-4 | Magnesium | 28200 | | | P |
| 7439-96-5 | Manganese | 1.9 | U | | P |
| 7723-14-0 | Phosphorous | 24.2 | U | | P |
| 7440-09-7 | Potassium | 1100 | B | | P |
| 7440-21-3 | Silicon | 7520 | | | P |
| 7440-23-5 | Sodium | 41100 | | | P |
| 7440-66-6 | Zinc | 2.3 | B | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW5S-W-19260F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: 21005 SAS No.: _____ SDG No.: 109662
Matrix (soil/water): WATER Lab Sample ID: 637488
Level (low/med): LOW Date Received: 09/14/05
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 54.6 | U | | P |
| 7440-70-2 | Calcium | 102000 | | | P |
| 7439-89-6 | Iron | 84.3 | U | | P |
| 7439-95-4 | Magnesium | 29300 | | | P |
| 7439-96-5 | Manganese | 1.9 | U | | P |
| 7723-14-0 | Phosphorous | 24.2 | U | | P |
| 7440-09-7 | Potassium | 1130 | B | | P |
| 7440-21-3 | Silicon | 8550 | | | P |
| 7440-23-5 | Sodium | 17700 | | | P |
| 7440-66-6 | Zinc | 5.6 | B | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

Form I - IN



RSK-175

SAMPLE DATA SUMMARY PACKAGE

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

RMW07SW19258

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 109662

Matrix: (soil/water) WATER

Lab Sample ID: 637482

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 21SEP050835-R011

Level: (low/med) LOW

Date Received: 09/14/05

% Moisture: not dec. _____

Date Analyzed: 09/21/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|--------------|----------|--|---|
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRMW1SW19259

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 109662

Matrix: (soil/water) WATER

Lab Sample ID: 637483

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 21SEP050835-R021

Level: (low/med) LOW

Date Received: 09/14/05

% Moisture: not dec. _____

Date Analyzed: 09/21/05

GC Column: RTUPL0T ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | | Q |
|--------------|----------|--|---|---|
| 74-82-8----- | Methane | 2.0 | U | |
| 74-84-0----- | Ethane | 4.0 | U | |
| 74-85-1----- | Ethene | 3.0 | U | |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRMW5SW19260

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 109662

Matrix: (soil/water) WATER

Lab Sample ID: 637484

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 21SEP050835-R031

Level: (low/med) LOW

Date Received: 09/14/05

% Moisture: not dec. _____

Date Analyzed: 09/21/05

GC Column: RTUPLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: | |
|--------------|----------|----------------------|---|
| | | (ug/L or ug/Kg) UG/L | Q |
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRQCTBW16520

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 109662

Matrix: (soil/water) WATER

Lab Sample ID: 637485

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 21SEP050835-R041

Level: (low/med) LOW

Date Received: 09/14/05

% Moisture: not dec. _____

Date Analyzed: 09/21/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | | Q |
|--------------|----------|--|---|---|
| 74-82-8----- | Methane | 2.0 | U | |
| 74-84-0----- | Ethane | 4.0 | U | |
| 74-85-1----- | Ethene | 3.0 | U | |

FORM I VOA

December 2, 2005

Mr. Clyde Dennis
Argonne National Laboratory
9700 S. Cass Avenue
Bldg. 20, Office B149
Argonne, IL 60439

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

Re: Laboratory Project No. 21005
Case: MORRILL; SDG: 109677

Dear Mr. Dennis:

Enclosed are the analytical results for samples received by STL Burlington on September 15, 2005. This report is sequentially numbered starting with page 0001 and ending with page 0103. Laboratory identification numbers were assigned, and designated as follows:

| <u>Lab ID</u> | <u>Client Sample ID</u> | <u>Sample Date</u> | <u>Sample Matrix</u> |
|-----------------------------------|-----------------------------|------------------------|--------------------------|
| Received: 09/15/05 ETR No: 109677 | | | |
| 637560 | MRMW6S-W-19263 | 09/14/05 | Water |
| 637560DP | MRMW6S-W-19263REP | 09/14/05 | Water |
| 637560MS | MRMW6S-W-19263MS | 09/14/05 | Water |
| 637561 | MRMW6S-W-19263F | 09/14/05 | Filtrate |
| 637561DP | MRMW6S-W-19263FREP | 09/14/05 | Filtrate |
| 637561MS | MRMW6S-W-19263FMS | 09/14/05 | Filtrate |
| 637562 | MRMW3S-W-19261 | 09/13/05 | Water |
| 637563 | MRMW3S-W-19261F | 09/13/05 | Filtrate |
| 637564 | MRQCTB-W-16523 | 09/14/05 | Water |
| 637565 | MRMW2S-W-19264 | 09/14/05 | Water |
| 637566 | MRMW2S-W-19264F | 09/14/05 | Filtrate |
| 637567 | MRMW4S-W-19262 | 09/14/05 | Water |
| 637568 | MRMW4S-W-19262F | 09/14/05 | Filtrate |

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal. In order to accommodate field length limitations in processing the data summary forms, the laboratory did, in certain instances, abbreviate the sample identifier. The electronically formatted data provides for the full sample identifier.

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes, although, for the ion chromatography analysis, the instrumentation has within it a pretreatment system that does provide filtration as a function of routine operation.

Matrix spike and replicate were performed on samples MRMW6S-W-19263 and MRMW6S-W-19263F.

Analysis of the samples for metals elements, including the primary analysis of phosphorus, was performed in the context of SW846 Method 3010A/6010B. A laboratory control sample was prepared and analyzed in association with the samples, and the target elements recovered well in the analyses. The analysis of the method blank associated with the analytical work did yield results below the established reporting limits. Secondly, results for orthophosphate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. For this parameter as well, there was an observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit. This was reflected in the positive results that were observed from the analysis of associated method blanks and performance blanks within the analytical sequence.

The primary analysis of the samples for nitrate nitrogen was performed in the context of USEPA Method 353.2, using preserved sample volumes. Laboratory control samples were prepared and analyzed in association with the samples, and there was acceptable recovery. The analysis of the method blanks associated with the analytical work did yield results below the established reporting limit. Secondly, results for nitrate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was a method and calibration blank in the analytical sequence 09/15/05 for nitrate nitrogen that was above the reporting limit. The concentration of sample MRMW3S-W-19261 reported from this analysis was ten times above the concentration of the method and calibration blanks. It should be also noted that there was a method blank in the analytical sequence 09/16/05 for nitrate nitrogen that was above the reporting limit. The concentration of samples MRMW6S-W-19263 and MRMW6S-W-19263DP were reported from this analysis as non detects with an elevated reporting limit.

The samples were analyzed for nitrite nitrogen by USEPA Method 354.1. A laboratory control sample was prepared and analyzed in association with the samples, and the nitrite nitrogen was recovered well in the analysis. The analysis of the method blanks associated with the analytical work did yield results below the established reporting limit.

Results for chloride and sulfate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be also noted that there was a calibration blank in the analytical sequence 09/15/05 for chloride that was above the reporting limit. Samples reported from this sequence yielded concentration greater than ten times the concentration found in this blank. In the analytical sequence 09/29/05 for sulfate, there was a continuing calibration verification standard with recoveries that was slightly above the control limit. Laboratory control samples were prepared and analyzed in association with the samples, and they recovered well in the analysis. The analysis of the method blanks associated with the analytical work did yield results below the established reporting limit.

The samples were analyzed for total organic carbon by USEPA Method 415.1. A laboratory control sample was prepared and analyzed in association with the samples, and the spiked organic carbon was recovered well in the analysis. The analysis of the method blank associated with the analytical work did yield a result below the established reporting limit.

The samples were analyzed for sulfide by USEPA Method 376.2. A laboratory control sample was prepared and analyzed in association with the samples, and there was acceptable recovery. The analysis of the method blank associated with the analytical work was free of contamination.

The samples were analyzed for alkalinity by USEPA Method 310.1. A laboratory control sample was prepared and analyzed in association with the samples, and there was acceptable recovery. The analysis of the method blank associated with the analytical work was free of contamination.

The samples were analyzed for methane, ethane, and ethene by Method RSK-175. A laboratory control sample was prepared and analyzed in association with the samples, and there was an acceptable recovery of the target analytes in that analysis. The method blank that was analyzed in association with the samples was free of contamination.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,



Kirk F. Young
Project Manager

for

Enclosure

STL Burlington Data Qualifier Definitions

Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- * Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

- | | |
|----|-----------------------------------|
| P | ICP-AES |
| MS | ICP-MS |
| CV | Cold Vapor AA |
| AS | Semi-Automated Spectrophotometric |

7601



**Sample Data Summary Package
For Wet Chemistry**

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW6S-W-19263

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109677

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 637560

Matrix: WATER

Client: ARGLAB

Date Received: 09/15/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|-----|--------|---------|-------|
| 300.0 | O-Phosphate as P | 09/15/05 | BLKIC091505B | ug/L | 1 | 200 | 272 | |
| 300.0 | Nitrate as N | 09/16/05 | BLKIC091605D | ug/L | 2 | 400 | 400 | U |
| 300.0 | Chloride | 09/16/05 | BLKIC091605B | ug/L | 2 | 400 | 27200 | |
| 300.0 | Sulfate | 09/17/05 | BLKIC091705D | ug/L | 500 | 100000 | 1330000 | |
| 353.2 | Nitrate/Nitrite Nitrogen | 09/16/05 | BLKNN091605B | ug/L | 1 | 10.0 | 10.0 | U |
| 354.1 | Nitrite Nitrogen | 09/15/05 | BLKNI091505B | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 09/20/05 | BLKSL092005A | ug/L | 1 | 20.0 | 44.3 | |
| 415.1 | Organic Carbon, Total | 09/16/05 | BLKTO091605C | ug/L | 1 | 1000 | 1000 | U |

Printed on: 12/01/05 11:51 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW6S-W-19263F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109677

Lab Code: STLV

Case No.: MORRILL

Lab Sample ID: 637561

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/15/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Total Alkalinity | 09/24/05 | BLKAL092405B | ug/L | 1 | 1000 | 261000 | |
| 310.1 | Bicarbonate Alkalinity | 09/24/05 | BLKAL092405C | ug/L | 1 | 1000 | 261000 | |
| 310.1 | Carbonate Alkalinity | 09/24/05 | BLKAL092405D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Hydroxide Alkalinity | 09/24/05 | BLKAL092405E | ug/L | 1 | 1000 | 1000 | U |

Printed on: 12/01/05 11:51 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW3S-W-19261

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109677

Lab Code: STLV

Case No.: MORRILL

Lab Sample ID: 637562

Matrix: WATER

Client: ARGLAB

Date Received: 09/15/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | O-Phosphate as P | 09/15/05 | BLKIC091505B | ug/L | 1 | 200 | 374 | |
| 300.0 | Nitrate as N | 09/15/05 | BLKIC091505C | ug/L | 1 | 200 | 13500 | |
| 300.0 | Chloride | 09/15/05 | BLKIC091505D | ug/L | 1 | 200 | 3280 | |
| 300.0 | Sulfate | 09/16/05 | BLKIC091605A | ug/L | 2 | 400 | 28000 | |
| 353.2 | Nitrate/Nitrite Nitrogen | 09/17/05 | BLKNN091705A | ug/L | 20 | 200 | 14600 | |
| 354.1 | Nitrite Nitrogen | 09/15/05 | BLKNI091505B | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 09/20/05 | BLKSL092005A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 09/16/05 | BLKTO091605C | ug/L | 1 | 1000 | 1000 | U |

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW3S-W-19261F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109677

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 637563

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/15/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Total Alkalinity | 09/24/05 | BLKAL092405B | ug/L | 1 | 1000 | 280000 | |
| 310.1 | Bicarbonate Alkalinity | 09/24/05 | BLKAL092405C | ug/L | 1 | 1000 | 280000 | |
| 310.1 | Carbonate Alkalinity | 09/24/05 | BLKAL092405D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Hydroxide Alkalinity | 09/24/05 | BLKAL092405E | ug/L | 1 | 1000 | 1000 | U |

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW2S-W-19264

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109677

Lab Code: STLV

Case No.: MORRILL

Lab Sample ID: 637565

Matrix: WATER

Client: ARGLAB

Date Received: 09/15/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | O-Phosphate as P | 09/15/05 | BLKIC091505B | ug/L | 1 | 200 | 307 | |
| 300.0 | Nitrate as N | 09/16/05 | BLKIC091605D | ug/L | 2 | 400 | 18200 | |
| 300.0 | Chloride | 09/15/05 | BLKIC091505D | ug/L | 1 | 200 | 11000 | |
| 300.0 | Sulfate | 09/29/05 | BLKIC092905C | ug/L | 5 | 1000 | 56600 | |
| 353.2 | Nitrate/Nitrite Nitrogen | 09/17/05 | BLKNN091705A | ug/L | 20 | 200 | 20400 | |
| 354.1 | Nitrite Nitrogen | 09/15/05 | BLKNI091505B | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 09/20/05 | BLKSL092005A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 09/16/05 | BLKTO091605C | ug/L | 1 | 1000 | 1000 | U |

Printed on: 12/01/05 11:51 AM

WET CHEMISTRY

Sample Report Summary

| |
|--------------------------------------|
| Client Sample No. MRMW2S-W-19264F |
|--------------------------------------|

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109677

Lab Code: STLV

Case No.: MORRILL

Lab Sample ID: 637566

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/15/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Total Alkalinity | 09/24/05 | BLKAL092405B | ug/L | 1 | 1000 | 289000 | |
| 310.1 | Bicarbonate Alkalinity | 09/24/05 | BLKAL092405C | ug/L | 1 | 1000 | 289000 | |
| 310.1 | Carbonate Alkalinity | 09/24/05 | BLKAL092405D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Hydroxide Alkalinity | 09/24/05 | BLKAL092405E | ug/L | 1 | 1000 | 1000 | U |

Printed on: 12/01/05 11:51 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW4S-W-19262

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109677

Lab Code: STLVY

Case No.: MORRILL

Lab Sample ID: 637567

Matrix: WATER

Client: ARGLAB

Date Received: 09/15/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | O-Phosphate as P | 09/15/05 | BLKIC091505B | ug/L | 1 | 200 | 271 | |
| 300.0 | Nitrate as N | 09/16/05 | BLKIC091605D | ug/L | 2 | 400 | 20800 | |
| 300.0 | Chloride | 09/15/05 | BLKIC091505D | ug/L | 1 | 200 | 10300 | |
| 300.0 | Sulfate | 09/16/05 | BLKIC091605A | ug/L | 2 | 400 | 24600 | |
| 353.2 | Nitrate/Nitrite Nitrogen | 09/17/05 | BLKNN091705A | ug/L | 20 | 200 | 22900 | |
| 354.1 | Nitrite Nitrogen | 09/15/05 | BLKNI091505B | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 09/20/05 | BLKSL092005A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 09/16/05 | BLKTO091605C | ug/L | 1 | 1000 | 1000 | U |

Printed on: 12/01/05 11:51 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW4S-W-19262F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109677

Lab Code: STLV

Case No.: MORRILL

Lab Sample ID: 637568

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/15/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Total Alkalinity | 09/24/05 | BLKAL092405B | ug/L | 1 | 1000 | 292000 | |
| 310.1 | Bicarbonate Alkalinity | 09/24/05 | BLKAL092405C | ug/L | 1 | 1000 | 292000 | |
| 310.1 | Carbonate Alkalinity | 09/24/05 | BLKAL092405D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Hydroxide Alkalinity | 09/24/05 | BLKAL092405E | ug/L | 1 | 1000 | 1000 | U |

Printed on: 12/01/05 11:51 AM



**Sample Data Summary Package
For Metals**

USEPA-CLP METALS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 21005Lab Code: STLVT Case No.: 21005 SAS No.: _____ SDG No.: 109677

SOW No.: _____

| EPA Sample No. | Lab Sample ID. |
|-------------------------|-----------------|
| <u>MRMW2S-W-19264F</u> | <u>637566</u> |
| <u>MRMW3S-W-19261F</u> | <u>637563</u> |
| <u>MRMW4S-W-19262F</u> | <u>637568</u> |
| <u>MRMW6S-W-19263F</u> | <u>637561</u> |
| <u>MRMW6S-W-19263FD</u> | <u>637561DP</u> |
| <u>MRMW6S-W-19263FS</u> | <u>637561MS</u> |

Were ICP interelement corrections applied? Yes/No YESWere ICP background corrections applied? Yes/No YESIf yes-were raw data generated before
application of background corrections? Yes/No NOComments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: _____ Title: _____

COVER PAGE - IN

USEPA-CLP METALS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW2S-W-19264F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: 21005 SAS No.: _____ SDG No.: 109677
Matrix (soil/water): FILTRATE Lab Sample ID: 637566
Level (low/med): LOW Date Received: 9/15/2005
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 65.3 | U | N | P |
| 7440-70-2 | Calcium | 130000 | | | P |
| 7439-89-6 | Iron | 84.3 | U | * | P |
| 7439-95-4 | Magnesium | 21400 | | | P |
| 7439-96-5 | Manganese | 1.9 | U | N | P |
| 7723-14-0 | Phosphorous | 24.2 | U | N | P |
| 7440-09-7 | Potassium | 902 | B | | P |
| 7440-21-3 | Silicon | 8720 | | | P |
| 7440-23-5 | Sodium | 19200 | | | P |
| 7440-66-6 | Zinc | 7.9 | B | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP METALS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW3S-W-19261F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: 21005 SAS No.: _____ SDG No.: 109677
Matrix (soil/water): FILTRATE Lab Sample ID: 637563
Level (low/med): LOW Date Received: 9/15/2005
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 65.3 | U | N | P |
| 7440-70-2 | Calcium | 106000 | | | P |
| 7439-89-6 | Iron | 84.3 | U | * | P |
| 7439-95-4 | Magnesium | 15600 | | | P |
| 7439-96-5 | Manganese | 2.3 | B | N | P |
| 7723-14-0 | Phosphorous | 24.4 | B | N | P |
| 7440-09-7 | Potassium | 699 | B | | P |
| 7440-21-3 | Silicon | 7040 | | | P |
| 7440-23-5 | Sodium | 25900 | | | P |
| 7440-66-6 | Zinc | 3.3 | B | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP METALS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW4S-W-19262F

Lab Name: STL BURLINGTON Contract: 21005

Lab Code: STLVT Case No.: 21005 SAS No.: _____ SDG No.: 109677

Matrix (soil/water): FILTRATE Lab Sample ID: 637568

Level (low/med): LOW Date Received: 9/15/2005

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 65.3 | U | N | P |
| 7440-70-2 | Calcium | 92500 | | | P |
| 7439-89-6 | Iron | 84.3 | U | * | P |
| 7439-95-4 | Magnesium | 34100 | | | P |
| 7439-96-5 | Manganese | 3.9 | B | N | P |
| 7723-14-0 | Phosphorous | 24.2 | U | N | P |
| 7440-09-7 | Potassium | 942 | B | | P |
| 7440-21-3 | Silicon | 8010 | | | P |
| 7440-23-5 | Sodium | 18000 | | | P |
| 7440-66-6 | Zinc | 9.4 | B | | P |

Color Before: colorless Clarity Before: clear Texture: _____

Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

USEPA-CLP METALS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW6S-W-19263F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: 21005 SAS No.: _____ SDG No.: 109677
Matrix (soil/water): FILTRATE Lab Sample ID: 637561
Level (low/med): LOW Date Received: 9/15/2005
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 65.3 | U | N | P |
| 7440-70-2 | Calcium | 481000 | | | P |
| 7439-89-6 | Iron | 84.3 | U | * | P |
| 7439-95-4 | Magnesium | 104000 | | | P |
| 7439-96-5 | Manganese | 330 | | N | P |
| 7723-14-0 | Phosphorous | 24.2 | U | N | P |
| 7440-09-7 | Potassium | 2060 | B | | P |
| 7440-21-3 | Silicon | 10000 | | | P |
| 7440-23-5 | Sodium | 34200 | | | P |
| 7440-66-6 | Zinc | 18.3 | B | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____
Comments: _____



RSK-175

SAMPLE DATA SUMMARY PACKAGE

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRMW2SW19264

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 109677

Matrix: (soil/water) WATER

Lab Sample ID: 637565

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 22SEP050843-R041

Level: (low/med) LOW

Date Received: 09/15/05

% Moisture: not dec. _____

Date Analyzed: 09/22/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---------|----------|--|---|
|---------|----------|--|---|

| | | | |
|--------------|---------|-----|---|
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRMW3SW19261

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 109677

Matrix: (soil/water) WATER

Lab Sample ID: 637562

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 22SEP050843-R021

Level: (low/med) LOW

Date Received: 09/15/05

% Moisture: not dec. _____

Date Analyzed: 09/22/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: | |
|--------------|----------|----------------------|---|
| | | (ug/L or ug/Kg) UG/L | Q |
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRMW4SW19262

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 109677

Matrix: (soil/water) WATER

Lab Sample ID: 637567

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 22SEP050843-R051

Level: (low/med) LOW

Date Received: 09/15/05

% Moisture: not dec. _____

Date Analyzed: 09/22/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|--------------|----------|--|---|
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRMW6SW19263

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 109677

Matrix: (soil/water) WATER

Lab Sample ID: 637560

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 22SEP050843-R011

Level: (low/med) LOW

Date Received: 09/15/05

% Moisture: not dec. _____

Date Analyzed: 09/22/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: | |
|--------------|----------|----------------------|---|
| | | (ug/L or ug/Kg) UG/L | Q |
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRQCTBW16523

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 109677

Matrix: (soil/water) WATER

Lab Sample ID: 637564

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 22SEP050843-R031

Level: (low/med) LOW

Date Received: 09/15/05

% Moisture: not dec. _____

Date Analyzed: 09/22/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: | |
|--------------|----------|----------------------|---|
| | | (ug/L or ug/Kg) UG/L | Q |
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

December 5, 2005

Mr. Clyde Dennis
Argonne National Laboratory
9700 S. Cass Avenue
Bldg. 203, Office B149
Argonne, IL 60439

STL Burlington

208 South Park Drive, Suite 1
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

Re: Laboratory Project No. 21005
Case: MORRILL; SDG: 109712

Dear Mr. Dennis:

Enclosed are the analytical results for samples received by STL Burlington on September 16, 2005. This report is sequentially numbered starting with page 0001 and ending with page XXXX. Laboratory identification numbers were assigned, and designated as follows:

| <u>Lab ID</u> | <u>Client Sample ID</u> | <u>Sample Date</u> | <u>Sample Matrix</u> |
|-----------------------------------|-----------------------------|------------------------|--------------------------|
| Received: 09/16/05 ETR No: 109712 | | | |
| 637802 | MRMW8S-W-19265 | 09/14/05 | Water |
| 637803 | MRMW8S-W-19265F | 09/14/05 | Filtrate |
| 637804 | MRQCT8-W-16527 | 09/14/05 | Water |

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal. In order to accommodate field length limitations in processing the data summary forms, the laboratory did, in certain instances, abbreviate the sample identifier. The electronically formatted data provides for the full sample identifier.

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes, although, for the ion chromatography analysis, the instrumentation has within it a pretreatment system that does provide filtration as a function of routine operation.

Analysis of the samples for metals elements, including the primary analysis of phosphorus, was performed in the context of SW846 Method 3010A/6010B. A laboratory control sample was prepared and analyzed in association with the samples, and the target elements recovered well in the analyses. The analysis of the method blank associated with the analytical work did yield results below the established reporting limits. Secondly, results for orthophosphate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. For this parameter as well, there was an observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit. This was reflected in the positive results that were observed from the analysis of associated method blanks and performance blanks within the analytical sequence.

The primary analysis of the samples for nitrate nitrogen was performed in the context of USEPA Method 353.2, using the sample volumes designated for total carbon analysis. A laboratory control sample was prepared and analyzed in association with the samples, and there was acceptable recovery. The analysis of the method blank associated with the analytical work did yield results below the established reporting limit. Secondly, results for nitrate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. For this parameter as well, there was an observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit.

The samples were analyzed for nitrite nitrogen by USEPA Method 354.1. A laboratory control sample was prepared and analyzed in association with the samples, and the nitrite nitrogen was recovered well in the analysis. The analysis of the method blanks associated with the analytical work did yield results below the established reporting limit.

Results for chloride and sulfate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. There was an observed offset in the calibration associated with the ion chromatography analysis for chloride that did elevate results at or near the reporting limit. This was reflected in the positive results that were observed from the analysis of associated method blank within the analytical sequence. Samples reported from this sequence yielded concentration greater than ten times the concentration found in this blank. A laboratory control sample was prepared and analyzed in association with the samples, and recovered well in the analysis. The analysis of the method blank associated with the analytical work did yield results below the established reporting limit.

The samples were analyzed for total organic carbon by USEPA Method 415.1. A laboratory control sample was prepared and analyzed in association with the samples, and the spiked organic carbon was recovered well in the analysis. The analysis of the method blank associated with the analytical work did yield a result below the established reporting limit.

The samples were analyzed for sulfide by USEPA Method 376.2. A laboratory control sample was prepared and analyzed in association with the samples, and there was acceptable recovery. The analysis of the method blank associated with the analytical work was free of contamination.

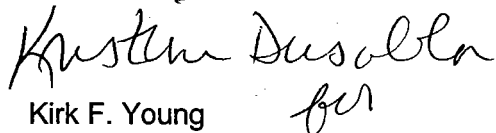
The samples were analyzed for alkalinity by USEPA Method 310.1. A laboratory control sample was prepared and analyzed in association with the samples, and there was acceptable recovery. The analysis of the method blank associated with the analytical work was free of contamination.

The samples were analyzed for methane, ethane, and ethene by Method RSK-175. A laboratory control sample was prepared and analyzed in association with the samples, and there was an acceptable recovery of the target analytes in that analysis. The method blank that was analyzed in association with the samples was free of contamination.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kirk F. Young".

Kirk F. Young
Project Manager

Enclosure

STL Burlington Data Qualifier Definitions

Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- * Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

- | | |
|----|-----------------------------------|
| P | ICP-AES |
| MS | ICP-MS |
| CV | Cold Vapor AA |
| AS | Semi-Automated Spectrophotometric |



**Sample Data Summary Package
For Wet Chemistry**

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW8S-W-19265

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109712

Lab Code: STLV

Case No.: 21005

Lab Sample ID: 637802

Matrix: WATER

Client: ARGLAB

Date Received: 09/16/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|------------------------|---------------------|-------|----|-------|--------|-------|
| 300.0 | Nitrate as N | 09/16/05 | BLKIC091605D | ug/L | 1 | 200 | 10400 | |
| 300.0 | O-Phosphate as P | 09/16/05 | BLKIC091605C | ug/L | 1 | 200 | 328 | |
| 300.0 | Chloride | 09/17/05 | BLKIC091705A | ug/L | 50 | 10000 | 41600 | |
| 300.0 | Sulfate | 09/17/05 | BLKIC091705D | ug/L | 50 | 10000 | 139000 | |
| 353.2 | Nitrate/Nitrite Nitrogen | 09/22/05 | BLKNN092205A | ug/L | 50 | 500 | 11700 | |
| 354.1 | Nitrite Nitrogen | 09/16/05 | BLKNI091605A | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 09/20/05 | BLKSL092005A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 09/29/05 | BLKTO092905A | ug/L | 1 | 1000 | 1000 | U |

Printed on: 12/02/05 12:30 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW8S-W-19265F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109712

Lab Code: STLVT

Case No.: 21005

Lab Sample ID: 637803

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/16/05

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Total Alkalinity | 09/24/05 | BLKAL092405B | ug/L | 1 | 1000 | 285000 | |
| 310.1 | Bicarbonate Alkalinity | 09/24/05 | BLKAL092405C | ug/L | 1 | 1000 | 285000 | |
| 310.1 | Carbonate Alkalinity | 09/24/05 | BLKAL092405D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Hydroxide Alkalinity | 09/24/05 | BLKAL092405E | ug/L | 1 | 1000 | 1000 | U |



**Sample Data Summary Package
For Metals**

USEPA-CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 21005Lab Code: STLVT Case No.: 21005 SAS No.: _____ SDG No.: 109712

SOW No.: _____

EPA Sample No.

MRMW8S-W-19265F

Lab Sample ID.

637803

Were ICP interelement corrections applied?

Yes/No YES

Were ICP background corrections applied?

Yes/No YESIf yes-were raw data generated before
application of background corrections?Yes/No NOComments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: _____

Date: _____

Title: _____

COVER PAGE - IN

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW8S-W-19265F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: 21005 SAS No.: _____ SDG No.: 109712
Matrix (soil/water): WATER Lab Sample ID: 637803
Level (low/med): LOW Date Received: 09/16/05
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 1880 | | | P |
| 7440-70-2 | Calcium | 252000 | | | P |
| 7439-89-6 | Iron | 919 | | | P |
| 7439-95-4 | Magnesium | 35100 | | | P |
| 7439-96-5 | Manganese | 416 | | | P |
| 7723-14-0 | Phosphorous | 654 | | | P |
| 7440-09-7 | Potassium | 1340 | B | | P |
| 7440-21-3 | Silicon | 9940 | | | P |
| 7440-23-5 | Sodium | 27900 | | | P |
| 7440-66-6 | Zinc | 11.4 | B | | P |

Not Filtered
Rejected
CBP 12/9/05

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____
Comments: _____

Form I - IN



RSK-175

SAMPLE DATA SUMMARY PACKAGE

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 21005

MRMW8SW19265

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 109712

Matrix: (soil/water) WATER

Lab Sample ID: 637802

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 22SEP050943-R061

Level: (low/med) LOW

Date Received: 09/16/05

% Moisture: not dec. _____

Date Analyzed: 09/22/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | | Q |
|--------------|----------|--|---|---|
| 74-82-8----- | Methane | 2.0 | U | |
| 74-84-0----- | Ethane | 4.0 | U | |
| 74-85-1----- | Ethene | 3.0 | U | |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRQCT8W16527

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 109712

Matrix: (soil/water) WATER

Lab Sample ID: 637804

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 22SEP050943-R071

Level: (low/med) LOW

Date Received: 09/16/05

% Moisture: not dec. _____

Date Analyzed: 09/22/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: | |
|--------------|----------|----------------------|---|
| | | (ug/L or ug/Kg) UG/L | Q |
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

April 5, 2006

Mr. Clyde Dennis
Argonne National Laboratory
9700 South Cass Avenue
Building 203, Office B149
Argonne, IL 60439

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

Re: Laboratory Project No. 21005
Case: MORRILL; SDG: 113239

Dear Mr. Dennis:

Enclosed are the analytical results for the samples that were received by STL Burlington on March 21st, 2006. Laboratory identification numbers were assigned, and designated as follows:

| <u>Lab ID</u> | <u>Client Sample ID</u> | <u>Sample Date</u> | <u>Sample Matrix</u> |
|-----------------------------------|-----------------------------|------------------------|--------------------------|
| Received: 03/21/06 ETR No: 113239 | | | |
| 661868 | MR-MW-6S-W-19990 | 03/20/06 | Water |
| 661869 | MR-MW-6S-W-19990F | 03/20/06 | Filtrate |
| 661870 | MR-MW-8S-W-19991 | 03/20/06 | Water |
| 661871 | MR-MW-8S-W-19991F | 03/20/06 | Filtrate |
| 661872 | MR-QCFB-W-19998 | 03/20/06 | Water |

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal. The nitrate and ortho-phosphate analyses that were performed by USEPA Method 300.0 did occur beyond the 48-hour holding time that is specified by the method. The analytical work occurred over the March 27th to April 4th timeframe.

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes, although, for the ion chromatography analysis, the instrumentation has within it a pretreatment system that does provide filtration as a function of routine operation.

The primary analysis of the samples for nitrate nitrogen was performed in the context of USEPA Method 353.2 for nitrate/nitrite nitrogen, using preserved sample volumes, and USEPA Method 354.1 for nitrite. Secondly, results for nitrate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed background in the analysis of the method blanks associated with the Method 353.2 analysis. The background concentration level approximated the established reporting limit, and was significantly less than the positive concentration levels in the field samples.

The primary analysis of the samples for phosphorus was performed in the context of SW846 Methods 3010A/6010B. Secondly, results for ortho-phosphate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit. This is reflected in the positive results in the analysis of the method blanks.

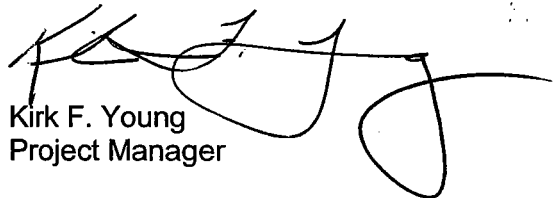
The samples were analyzed for methane, ethane, and ethene by Method RSK-175. Matrix spike and matrix spike duplicate analyses were not performed on samples in this sample set. A laboratory control sample was prepared and analyzed in association with the samples, and there was an acceptable recovery of the target analytes in that. The method blank that was analyzed in association with the samples was free of contamination.

The samples were additionally analyzed for sulfate and chloride by USEPA Method 300.0, for alkalinity by USEPA Method 310.1, for sulfide by USEPA Method 376.2, for total organic carbon by USEPA Method 415.1, and for trace metals by SW846 Methods 3010A/6010B.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,



Kirk F. Young
Project Manager

KFY/hsf
Enclosure

STL Burlington Data Qualifier Definitions

Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- * Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

- P ICP-AES
MS ICP-MS
CV Cold Vapor AA
AS Semi-Automated Spectrophotometric

[illegible]



**Sample Data Summary Package
For Wet Chemistry**

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MR-MW-6S-W-19990

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113239

Lab Code: STLV

Case No.: MORRILL

Lab Sample ID: 661868

Matrix: WATER

Client: ARGLAB

Date Received: 03/21/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|-----|-------|---------|-------|
| 300.0 | Chloride | 03/28/06 | BLKIC032806A | ug/L | 10 | 2000 | 31400 | |
| 300.0 | Sulfate | 03/31/06 | BLKIC033106A | ug/L | 200 | 40000 | 1560000 | |
| 300.0 | Nitrate as N | 03/27/06 | BLKIC032706C | ug/L | 1 | 200 | 321 | |
| 300.0 | O-Phosphate as P | 04/04/06 | BLKIC040406A | ug/L | 2 | 400 | 400 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 03/30/06 | BLKNN033006A | ug/L | 1 | 10.0 | 10.0 | U |
| 354.1 | Nitrite Nitrogen | 03/21/06 | BLKNI032106A | ug/L | 1 | 5.0 | 6.1 | |
| 376.2 | Sulfide | 03/27/06 | BLKSU032706A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 03/30/06 | BLKTO033006B | ug/L | 1 | 1000 | 1000 | U |

Printed on: 04/04/06 02:16 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MR-MW-6S-W-19990F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113239

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 661869

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/21/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Hydroxide Alkalinity | 03/28/06 | BLKAL032806D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Carbonate Alkalinity | 03/28/06 | BLKAL032806C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Bicarbonate Alkalinity | 03/28/06 | BLKAL032806B | ug/L | 1 | 1000 | 263000 | |
| 310.1 | Total Alkalinity | 03/28/06 | BLKAL032806A | ug/L | 1 | 1000 | 263000 | |

Printed on: 04/04/06 02:16 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MR-MW-8S-W-19991

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113239

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 661870

Matrix: WATER

Client: ARGLAB

Date Received: 03/21/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|-----|-------|--------|-------|
| 300.0 | Chloride | 03/28/06 | BLKIC032806A | ug/L | 10 | 2000 | 26800 | |
| 300.0 | Sulfate | 03/28/06 | BLKIC032806B | ug/L | 100 | 20000 | 159000 | |
| 300.0 | Nitrate as N | 03/27/06 | BLKIC032706C | ug/L | 1 | 200 | 8970 | |
| 300.0 | O-Phosphate as P | 03/27/06 | BLKIC032706D | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 03/28/06 | BLKNN032806A | ug/L | 10 | 100 | 8390 | |
| 354.1 | Nitrite Nitrogen | 03/21/06 | BLKNI032106A | ug/L | 1 | 5.0 | 10.9 | |
| 376.2 | Sulfide | 03/27/06 | BLKSU032706A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 03/30/06 | BLKTO033006B | ug/L | 1 | 1000 | 1120 | |

Printed on: 04/04/06 02:16 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MR-MW-8S-W-19991F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113239

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 661871

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/21/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Hydroxide Alkalinity | 03/28/06 | BLKAL032806D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Carbonate Alkalinity | 03/28/06 | BLKAL032806C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Bicarbonate Alkalinity | 03/28/06 | BLKAL032806B | ug/L | 1 | 1000 | 302000 | |
| 310.1 | Total Alkalinity | 03/28/06 | BLKAL032806A | ug/L | 1 | 1000 | 302000 | |

Printed on: 04/04/06 02:16 PM



**Sample Data Summary Package
For Metals**

USEPA - CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 21005Lab Code: STLVT Case No.: MORRILL SAS No.: _____ SDG No.: 113239

SOW No.: _____

EPA Sample No.
MR-MW-6S-W-19990F
MR-MW-8S-W-19991FLab Sample ID.
661869
661871

Were ICP interelement corrections applied?

Yes/No YESWere ICP background corrections applied?
If yes-were raw data generated before
application of background corrections?Yes/No YESYes/No NOComments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: _____ Title: _____

COVER PAGE - IN

USEPA - CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MR-MW-6S-W-19990F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: MORRILL SAS No.: _____ SDG No.: 113239
Matrix (soil/water): WATER Lab Sample ID: 661869
Level (low/med): LOW Date Received: 03/21/06
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 16.5 | U | | P |
| 7440-70-2 | Calcium | 413000 | | E | P |
| 7439-89-6 | Iron | 129 | B | | P |
| 7439-95-4 | Magnesium | 86200 | | E | P |
| 7439-96-5 | Manganese | 263 | | E | P |
| 7723-14-0 | Phosphorous | 18.4 | U | | P |
| 7440-09-7 | Potassium | 1770 | B | | P |
| 7440-21-3 | Silicon | 9710 | | | P |
| 7440-23-5 | Sodium | 29000 | | | P |
| 7440-66-6 | Zinc | 19.6 | B | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____
Comments: _____

Form I - IN

USEPA - CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MR-MW-8S-W-19991F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: MORRILL SAS No.: _____ SDG No.: 113239
Matrix (soil/water): WATER Lab Sample ID: 661871
Level (low/med): LOW Date Received: 03/21/06
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 16.5 | U | | P |
| 7440-70-2 | Calcium | 110000 | | E | P |
| 7439-89-6 | Iron | 54.3 | U | | P |
| 7439-95-4 | Magnesium | 28500 | | E | P |
| 7439-96-5 | Manganese | 3.4 | B | E | P |
| 7723-14-0 | Phosphorous | 94.6 | B | | P |
| 7440-09-7 | Potassium | 699 | B | | P |
| 7440-21-3 | Silicon | 8220 | | | P |
| 7440-23-5 | Sodium | 24300 | | | P |
| 7440-66-6 | Zinc | 7.5 | U | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____
Comments: _____

Form I - IN



RSK-175

SAMPLE DATA SUMMARY PACKAGE

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 21005

MRMW6SW19990

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113239

Matrix: (soil/water) WATER

Lab Sample ID: 661868

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 22MA061157-R011

Level: (low/med) LOW

Date Received: 03/21/06

% Moisture: not dec. _____

Date Analyzed: 03/22/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | | Q |
|--------------|----------|--|---|---|
| 74-82-8----- | Methane | 2.0 | U | |
| 74-84-0----- | Ethane | 4.0 | U | |
| 74-85-1----- | Ethene | 3.0 | U | |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRMW8SW19991

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113239

Matrix: (soil/water) WATER

Lab Sample ID: 661870

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 22MA061157-R021

Level: (low/med) LOW

Date Received: 03/21/06

% Moisture: not dec. _____

Date Analyzed: 03/22/06

GC Column: RTUPLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: | |
|--------------|----------|----------------------|---|
| | | (ug/L or ug/Kg) UG/L | Q |
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRQCFBW19998

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113239

Matrix: (soil/water) WATER

Lab Sample ID: 661872

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 22MA061157-R031

Level: (low/med) LOW

Date Received: 03/21/06

% Moisture: not dec. _____

Date Analyzed: 03/22/06

GC Column: RTUPLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---------|----------|--|---|
|---------|----------|--|---|

| | | | |
|--------------|---------|-----|---|
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

April 10, 2006

Mr. Clyde Dennis
Argonne National Laboratory
9700 South Cass Avenue
Building 203, Office B149
Argonne, IL 60439

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

Re: Laboratory Project No. 21005
Case: MORRILL; SDG: 113257

Dear Mr. Dennis:

Enclosed are analytical results for samples that were received by STL Burlington on March 22nd, 2006. Laboratory identification numbers were assigned, and designated as follows:

| <u>Lab ID</u> | <u>Client Sample ID</u> | <u>Sample Date</u> | <u>Sample Matrix</u> |
|-----------------------------------|-----------------------------|------------------------|--------------------------|
| Received: 03/22/06 ETR No: 113257 | | | |
| 661931 | MRMW4SW19993 | 03/21/06 | Water |
| 661932 | MRMW4SW19993F | 03/21/06 | Filtrate |
| 661933 | MRMW2SW19992 | 03/21/06 | Water |
| 661934 | MRMW2SW19992F | 03/21/06 | Filtrate |
| 661935 | MRMW10SW19999 | 03/21/06 | Water |
| 661936 | MRMW10SW19999F | 03/21/06 | Filtrate |
| 661937 | MRQCFBW20010 | 03/21/06 | Water |

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal. The nitrate and ortho-phosphate analyses that were performed by USEPA Method 300.0 did occur beyond the 48-hour holding time that is specified by the method. The analytical work occurred over the March 29th to April 4th timeframe.

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes, although, for the ion chromatography analysis, the instrumentation has within it a pretreatment system that does provide filtration as a function of routine operation.

The primary analysis of the samples for nitrate nitrogen was performed in the context of USEPA Method 353.2 for nitrate/nitrite nitrogen, using preserved sample volumes, and USEPA Method 354.1 for nitrite. Secondly, results for nitrate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed background in the analysis of one of the method blanks associated with the Method 353.2 analysis. The background concentration level approximated the established reporting limit, and was significantly less than the positive concentration level in the associated field sample.

The primary analysis of the samples for phosphorus was performed in the context of SW846 Methods 3010A/6010B. Secondly, results for ortho-phosphate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit. This is reflected in the positive result in the analysis of the method blank.

The samples were analyzed for methane, ethane, and ethene by Method RSK-175. Matrix spike and matrix spike duplicate analyses were not performed on samples in this sample set. A laboratory control sample was prepared and analyzed in association with the samples, and there was an acceptable recovery of the target analytes in that. The method blank that was analyzed in association with the samples was free of contamination.

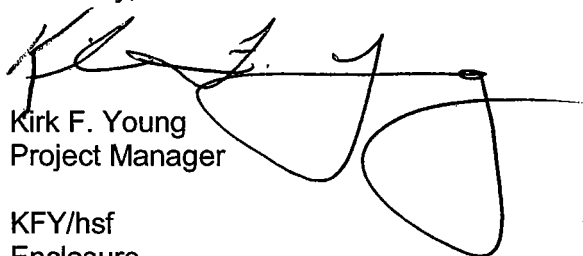
The samples were additionally analyzed for sulfate and chloride by USEPA Method 300.0, for alkalinity by USEPA Method 310.1, for sulfide by USEPA Method 376.2, for total organic carbon by USEPA Method 415.1, and for trace metals by SW846 Methods 3010A/6010B.

It should be noted that there was an observed background in the method blank associated with the USEPA Method 300.0 analysis for chloride. The background concentration level approximated the established reporting limit, and was significantly less than the positive concentration level in the associated field sample.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,



Kirk F. Young
Project Manager

KFY/hsf
Enclosure

STL Burlington Data Qualifier Definitions

Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- * Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

- P ICP-AES
MS ICP-MS
CV Cold Vapor AA
AS Semi-Automated Spectrophotometric

4211

| MATRIX: WATER | | ARGONNE NATIONAL LABORATORY CHAIN OF CUSTODY RECORD* | | | | Shipping Container No. | |
|--|---------------------|---|-----|----------|-----------|---|---------|
| RECEIVING LAB: SEVERN-TRENT | | | | | | Shipping Info: | |
| PROJECT/SITE: MORRILL, KS | | | | | | ANL Field Contact (Name & Temporary Phone): DARYL BIERE 402/416-7255 | |
| SAMPLER(S) (Signature) <i>Joe C. Conk</i> | | ANALYSIS | | | | REMARKS | |
| DATE OF COLLECTION | SAMPLE ID NUMBER(S) | Number of containers | TOC | METHANOL | PHOSPHATE | CATIONS | TOTAL Z |
| 21 MAR 06 | MRMW45W19993 | 8 | ✓ | ✓ | ✓ | ✓ | ✓ |
| 21 MAR 06 | MRMW25W19992 | 8 | ✓ | ✓ | ✓ | ✓ | ✓ |
| 21 MAR 06 | MRMW105W19999 | 8 | ✓ | ✓ | ✓ | ✓ | ✓ |
| 21 MAR 06 | MRQCFBW20010 | 2 | ✓ | ✓ | ✓ | ✓ | ✓ |
| <p>TOC preserved pH<2 H₂SO₄</p> <p>Argonne's Alkalinity - RUSH</p> <p>Total N preserved pH<2 H₂SO₄</p> | | | | | | | |
| <p>Relinquished by (Signature) <i>Joe C. Conk</i> Date 21/03/06 Time 1930</p> <p>Received by (Signature) <i>[Signature]</i> Date 3/22/06 Time 1000</p> | | | | | | | |
| <p>*A sample is under custody if:</p> <p>1. It is in your possession; or,</p> <p>2. It is in your view, after having been in your possession; or,</p> <p>3. It was in your possession and you locked it up; or,</p> <p>4. It is in a designated secure area.</p> | | | | | | | |
| <p>FOR LAB USE ONLY</p> <p>Y N Custody seal was intact when shipment received.</p> <p>Sample containers were intact when received.</p> <p>Shipment was at required temperature when received.</p> <p>Sample labels, Tags and COC agree.</p> | | | | | | | |
| Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439 | | | | | | | |

ER-180 (4-01)



**Sample Data Summary Package
For Wet Chemistry**

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW4SW19993

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113257

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 661931

Matrix: WATER

Client: ARGLAB

Date Received: 03/22/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 03/22/06 | BLKIC032206A | ug/L | 1 | 200 | 9110 | |
| 300.0 | Sulfate | 03/22/06 | BLKIC032206B | ug/L | 10 | 2000 | 18200 | |
| 300.0 | Nitrate as N | 04/03/06 | BLKIC040306A | ug/L | 2 | 400 | 16200 | |
| 300.0 | O-Phosphate as P | 03/22/06 | BLKIC032206D | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 03/28/06 | BLKNN032806E | ug/L | 10 | 100 | 15200 | |
| 354.1 | Nitrite Nitrogen | 03/22/06 | BLKNI032206A | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 03/27/06 | BLKSU032706A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 04/03/06 | BLKTO040306A | ug/L | 1 | 1000 | 9280 | |

WET CHEMISTRY

Sample Report Summary

MRMW4SW19993F

SDG No.: 113257

Lab Sample ID: 661932

Date Received: 03/22/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Hydroxide Alkalinity | 03/28/06 | BLKAL032806D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Carbonate Alkalinity | 03/28/06 | BLKAL032806C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Bicarbonate Alkalinity | 03/28/06 | BLKAL032806B | ug/L | 1 | 1000 | 222000 | |
| 310.1 | Total Alkalinity | 03/28/06 | BLKAL032806A | ug/L | 1 | 1000 | 222000 | |

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW2SW19992

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113257

Lab Code: STLV

Case No.: MORRILL

Lab Sample ID: 661933

Matrix: WATER

Client: ARGLAB

Date Received: 03/22/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 03/22/06 | BLKIC032206A | ug/L | 10 | 2000 | 23300 | |
| 300.0 | Sulfate | 03/22/06 | BLKIC032206B | ug/L | 10 | 2000 | 51000 | |
| 300.0 | Nitrate as N | 04/03/06 | BLKIC040306A | ug/L | 5 | 1000 | 25400 | |
| 300.0 | O-Phosphate as P | 03/22/06 | BLKIC032206D | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 03/28/06 | BLKNN032806F | ug/L | 15 | 150 | 25200 | |
| 354.1 | Nitrite Nitrogen | 03/22/06 | BLKNI032206A | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 03/27/06 | BLKSU032706A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 04/03/06 | BLKTO040306A | ug/L | 1 | 1000 | 7630 | |

Printed on: 04/05/06 03:44 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW2SW19992F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113257

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 661934

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/22/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Hydroxide Alkalinity | 03/28/06 | BLKAL032806D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Carbonate Alkalinity | 03/28/06 | BLKAL032806C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Bicarbonate Alkalinity | 03/28/06 | BLKAL032806B | ug/L | 1 | 1000 | 301000 | |
| 310.1 | Total Alkalinity | 03/28/06 | BLKAL032806A | ug/L | 1 | 1000 | 301000 | |

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW10SW19999

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113257

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 661935

Matrix: WATER

Client: ARGLAB

Date Received: 03/22/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|------------------------|---------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 03/22/06 | BLKIC032206A | ug/L | 1 | 200 | 6070 | |
| 300.0 | Sulfate | 03/22/06 | BLKIC032206B | ug/L | 10 | 2000 | 42000 | |
| 300.0 | Nitrate as N | 03/29/06 | BLKIC032906A | ug/L | 1 | 200 | 357 | |
| 300.0 | O-Phosphate as P | 03/22/06 | BLKIC032206D | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 03/28/06 | BLKNN032806D | ug/L | 1 | 10.0 | 162 | |
| 354.1 | Nitrite Nitrogen | 03/22/06 | BLKNI032206A | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 03/27/06 | BLKSU032706A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 04/03/06 | BLKTO040306A | ug/L | 1 | 1000 | 4260 | |

Printed on: 04/05/06 03:44 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW10SW19999F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113257

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 661936

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/22/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Hydroxide Alkalinity | 03/28/06 | BLKAL032806D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Carbonate Alkalinity | 03/28/06 | BLKAL032806C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Bicarbonate Alkalinity | 03/28/06 | BLKAL032806B | ug/L | 1 | 1000 | 351000 | |
| 310.1 | Total Alkalinity | 03/28/06 | BLKAL032806A | ug/L | 1 | 1000 | 351000 | |

Printed on: 04/05/06 03:44 PM



**Sample Data Summary Package
For Metals**

USEPA-CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 21005Lab Code: STLVT Case No.: MORRILL SAS No.: _____ SDG No.: 113257

SOW No.: _____

EPA Sample No.

MRMW10SW19999FMRMW2SW19992FMRMW4SW19993F

Lab Sample ID.

661936661934661932

Were ICP interelement corrections applied?

Yes/No YES

Were ICP background corrections applied?

Yes/No YESIf yes-were raw data generated before
application of background corrections?Yes/No NOComments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: _____

Date: _____

Title: _____

COVER PAGE - IN

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW10SW19999F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: MORRILL SAS No.: _____ SDG No.: 113257
Matrix (soil/water): FILTRATE Lab Sample ID: 661936
Level (low/med): LOW Date Received: 3/22/2006
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 16.5 | U | | P |
| 7440-70-2 | Calcium | 86300 | | E | P |
| 7439-89-6 | Iron | 54.3 | U | | P |
| 7439-95-4 | Magnesium | 32600 | | E | P |
| 7439-96-5 | Manganese | 64.4 | | | P |
| 7723-14-0 | Phosphorous | 20.6 | B | | P |
| 7440-09-7 | Potassium | 2120 | B | | P |
| 7440-21-3 | Silicon | 8900 | | | P |
| 7440-23-5 | Sodium | 28200 | | | P |
| 7440-66-6 | Zinc | 7.5 | U | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

Form I - IN

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW2SW19992F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: MORRILL SAS No.: _____ SDG No.: 113257
Matrix (soil/water): FILTRATE Lab Sample ID: 661934
Level (low/med): LOW Date Received: 3/22/2006
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 21.5 | B | | P |
| 7440-70-2 | Calcium | 125000 | | E | P |
| 7439-89-6 | Iron | 54.3 | U | | P |
| 7439-95-4 | Magnesium | 31400 | | E | P |
| 7439-96-5 | Manganese | 1.7 | B | | P |
| 7723-14-0 | Phosphorous | 18.4 | U | | P |
| 7440-09-7 | Potassium | 1890 | B | | P |
| 7440-21-3 | Silicon | 8290 | | | P |
| 7440-23-5 | Sodium | 18800 | | | P |
| 7440-66-6 | Zinc | 7.5 | U | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

Form I - IN

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW4SW19993F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: MORRILL SAS No.: _____ SDG No.: 113257
Matrix (soil/water): FILTRATE Lab Sample ID: 661932
Level (low/med): LOW Date Received: 3/22/2006
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 16.5 | U | | P |
| 7440-70-2 | Calcium | 55000 | | E | P |
| 7439-89-6 | Iron | 54.3 | U | | P |
| 7439-95-4 | Magnesium | 23400 | | E | P |
| 7439-96-5 | Manganese | 4.5 | B | | P |
| 7723-14-0 | Phosphorous | 24.1 | B | | P |
| 7440-09-7 | Potassium | 696 | B | | P |
| 7440-21-3 | Silicon | 5850 | | | P |
| 7440-23-5 | Sodium | 12900 | | | P |
| 7440-66-6 | Zinc | 12.8 | B | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____
Comments: _____

Form I - IN



RSK-175

SAMPLE DATA SUMMARY PACKAGE

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 21005

MRMW2SW19992

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113257

Matrix: (soil/water) WATER

Lab Sample ID: 661933

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 27MA060933-R101

Level: (low/med) LOW

Date Received: 03/22/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: | |
|--------------|----------|----------------------|---|
| | | (ug/L or ug/Kg) UG/L | Q |
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRMW4SW19993

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113257

Matrix: (soil/water) WATER

Lab Sample ID: 661931

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 27MA060933-R091

Level: (low/med) LOW

Date Received: 03/22/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---------|----------|--|---|
|---------|----------|--|---|

| | | | |
|--------------|---------|-----|---|
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRQCFBW20010

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113257

Matrix: (soil/water) WATER

Lab Sample ID: 661937

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 27MA060933-R121

Level: (low/med) LOW

Date Received: 03/22/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---------|----------|--|---|
|---------|----------|--|---|

| | | | |
|--------------|---------|-----|---|
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

RMW10SW1999

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113257

Matrix: (soil/water) WATER

Lab Sample ID: 661935

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 27MA060933-R111

Level: (low/med) LOW

Date Received: 03/22/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | | Q |
|--------------|----------|--|---|---|
| 74-82-8----- | Methane | 2.0 | U | |
| 74-84-0----- | Ethane | 4.0 | U | |
| 74-85-1----- | Ethene | 3.0 | U | |

FORM I VOA

April 12, 2006

Mr. Clyde Dennis
Argonne National Laboratory
9700 South Cass Avenue
Building 203, Office B149
Argonne, IL 60439

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

Re: Laboratory Project No. 21005
Case: MORRILL; SDG: 113285

Dear Mr. Dennis:

Enclosed are analytical results for samples that were received by STL Burlington on March 23rd, 2006. Laboratory identification numbers were assigned, and designated as follows:

| <u>Lab ID</u> | <u>Client Sample ID</u> | <u>Sample Date</u> | <u>Sample Matrix</u> |
|-----------------------------------|-----------------------------|------------------------|--------------------------|
| Received: 03/23/06 ETR No: 113285 | | | |
| 662148 | MRMW9SW20004 | 03/22/06 | Water |
| 662149 | MRMW9SW20004F | 03/22/06 | Filtrate |
| 662150 | MRMW7SW20000 | 03/22/06 | Water |
| 662151 | MRMW7SW20000F | 03/22/06 | Filtrate |
| 662152 | MRMW11SW20001 | 03/22/06 | Water |
| 662153 | MRMW11SW20001F | 03/22/06 | Filtrate |
| 662154 | MRMW5SW19996 | 03/22/06 | Water |
| 662155 | MRMW5SW19996F | 03/22/06 | Filtrate |
| 662156 | MRQCTBW20009 | 03/22/06 | Water |
| 662157 | MRQCDUW20005 | 03/22/06 | Water |
| 662158 | MRQCDUW20005F | 03/22/06 | Filtrate |
| 662159 | MRMW1SW20008 | 03/22/06 | Water |
| 662159DP | MRMW1SW20008REP | 03/22/06 | Water |
| 662159MD | MRMW1SW20008MSD | 03/22/06 | Water |
| 662160 | MRMW1SW20008F | 03/22/06 | Filtrate |
| 662160DP | MRMW1SW20008FREP | 03/22/06 | Filtrate |
| 662160MS | MRMW1SW20008FMS | 03/22/06 | Filtrate |
| 662161 | MRQCTBW20012 | 03/22/06 | Water |

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal. The nitrate analyses that were performed by USEPA Method 300.0 did occur

beyond the 48-hour holding time that is specified by the method. The analytical work occurred over the March 27th to April 3rd timeframe.

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes, although, for the ion chromatography analysis, the instrumentation has within it a pretreatment system that does provide filtration as a function of routine operation.

The primary analysis of the samples for nitrate nitrogen was performed in the context of USEPA Method 353.2 for nitrate/nitrite nitrogen, using preserved sample volumes, and USEPA Method 354.1 for nitrite. Secondly, results for nitrate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed background in the analysis of two of the method blanks associated with the Method 353.2 analysis. The background concentration level approximated the established reporting limit, and was significantly less than the positive concentration level in the associated field samples.

The primary analysis of the samples for phosphorus was performed in the context of SW846 Methods 3010A/6010B. Secondly, results for ortho-phosphate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit. This is reflected in the positive result in the analysis of the method blank.

The samples were analyzed for methane, ethane, and ethene by Method RSK-175. Matrix spike and matrix spike duplicate analyses were not performed on samples in this sample set. A laboratory control sample was prepared and analyzed in association with the samples, and there was an acceptable recovery of the target analytes in that. The method blank that was analyzed in association with the samples was free of contamination.

The samples were additionally analyzed for sulfate and chloride by USEPA Method 300.0, for alkalinity by USEPA Method 310.1, for sulfide by USEPA Method 376.2, for total organic carbon by USEPA Method 415.1, and for trace metals by SW846 Methods 3010A/6010B.

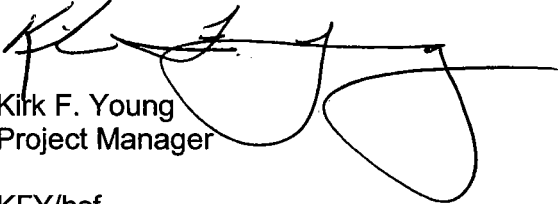
It should be noted that a matrix spike analysis was performed on sample MRMW1SW20008 for each of the inorganic parameters. There was no recovery of the spiked analyte in the Method 353.2 analysis for the nitrate/nitrite or in the Method 376.2 analysis for sulfide. In the case of nitrate/nitrite, the constituent concentration was significantly higher than the spike amount. The recovery of the spiked analyte was relatively low in the Method 300.3 analysis for nitrate (60 percent) and ortho-phosphate (58 percent), as it was in the Method 415.1 analysis for total organic carbon (37 percent). Additionally, there was an observed background in one of the method blanks associated with the USEPA Method 300.0 analysis for chloride. The background concentration level approximated the established reporting limit, and was significantly less than the positive concentration level in the associated field samples.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the

Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kirk F. Young', with a large, stylized loop at the end.

Kirk F. Young
Project Manager

KFY/hsf
Enclosure

STL Burlington Data Qualifier Definitions

Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- * Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

- | | |
|----|-----------------------------------|
| P | ICP-AES |
| MS | ICP-MS |
| CV | Cold Vapor AA |
| AS | Semi-Automated Spectrophotometric |

4212

| MATRIX: WATER | | ARGONNE NATIONAL LABORATORY | | | | Shipping Container No. | |
|---|---------------|---|---|---|---|---|---|
| RECEIVING LAB: SEVERN - TRENT | | CHAIN OF CUSTODY RECORD* | | | | Shipping Info: | |
| PROJECT/SITE: MORELL, KS | | | | | | ANL Field Contact (Name & Temporary Phone): | |
| SAMPLER(S) (Signature) | | | | | | DAEYL BIERE 402/416-7255 | |
| DATE OF COLLECTION | | ANALYSIS | | | | REMARKS | |
| SAMPLE ID NUMBER(S) | | Number of containers | | | | | |
| 22 MAR 06 | MRMW9SW20004 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 22 MAR 06 | MRMW7SW20000 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 22 MAR 06 | MRMW11SW20001 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 22 MAR 06 | MRMW5SW19996 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 22 MAR 06 | MRGLTBW20009 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| <div style="display: flex; justify-content: space-between;"> <div> <p>Relinquished by (Signature)</p> <p><i>John C. Combs</i></p> </div> <div> <p>Date</p> <p>22/03/06</p> </div> <div> <p>Time</p> <p>1930</p> </div> <div> <p>Received by (Signature)</p> <p><i>[Signature]</i></p> </div> <div> <p>Date</p> <p></p> </div> <div> <p>Time</p> <p></p> </div> <div> <p>Received by (Signature)</p> <p></p> </div> </div> | | | | | | | |
| <div style="display: flex; justify-content: space-between;"> <div> <p>Relinquished by (Signature)</p> <p><i>John C. Combs</i></p> </div> <div> <p>Date</p> <p></p> </div> <div> <p>Time</p> <p></p> </div> <div> <p>Received for Laboratory by</p> <p><i>[Signature]</i></p> </div> <div> <p>Date</p> <p>3/3/06</p> </div> <div> <p>Time</p> <p>0945</p> </div> <div> <p>Remarks</p> <p></p> </div> </div> | | | | | | | |
| Y | N | FOR LAB USE ONLY | | | | | |
| ✓ | | Custody seal was intact when shipment received. | | | | | |
| ✓ | | Sample containers were intact when received. | | | | | |
| ✓ | | Shipment was at required temperature when received. | | | | | |
| ✓ | | Sample labels, tags and COC agree. | | | | | |
| Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439 | | | | | | | |

3772

| MATRIX: WATER | | | ARGONNE NATIONAL LABORATORY | | | Shipping Container No. | | |
|--|-----------------|---|-----------------------------|---|---|---|---|---|
| RECEIVING LAB: SEVERN - TRENT | | | CHAIN OF CUSTODY RECORD* | | | Shipping Info: | | |
| PROJECT/SITE: MOREILL, KS | | | | | | ANL Field Contact (Name & Temporary Phone): | | |
| SAMPLER(S) (Signature) | | | ANALYSIS | | | PARML BERS 402/416-7255 | | |
| DATE OF COLLECTION | | | Number of containers | | | REMARKS | | |
| 22 MAR 06 | MR QCDU W 2000S | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 22 MAR 06 | MR MWIS W 2000B | 8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 22 MAR 06 | MR QCTB W 2001Z | 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| <div> <div>Relinquished by (Signature)</div> <div>22/03/06 1930</div> </div> <div> <div>Received by (Signature)</div> <div></div> </div> <div> <div>Relinquished by (Signature)</div> <div></div> </div> <div> <div>Date</div> <div></div> </div> <div> <div>Time</div> <div></div> </div> <div> <div>Received by (Signature)</div> <div></div> </div> <div> <div>Date</div> <div></div> </div> <div> <div>Time</div> <div></div> </div> | | | | | | | | |



**Sample Data Summary Package
For Wet Chemistry**

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW9SW20004

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113285

Lab Code: STLV

Case No.: MORRILL

Lab Sample ID: 662148

Matrix: WATER

Client: ARGLAB

Date Received: 03/23/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 03/24/06 | BLKIC032406G | ug/L | 1 | 200 | 5970 | |
| 300.0 | Sulfate | 04/03/06 | BLKIC040306C | ug/L | 10 | 2000 | 57100 | |
| 300.0 | Nitrate as N | 03/24/06 | BLKIC032406J | ug/L | 1 | 200 | 349 | |
| 300.0 | O-Phosphate as P | 03/24/06 | BLKIC032406H | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 04/05/06 | BLKNN040506A | ug/L | 1 | 10.0 | 42.7 | |
| 354.1 | Nitrite Nitrogen | 03/23/06 | BLKNI032306A | ug/L | 1 | 5.0 | 6.6 | |
| 376.2 | Sulfide | 03/27/06 | BLKSU032706A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 03/31/06 | BLKTO033106B | ug/L | 1 | 1000 | 1600 | |

Printed on: 04/07/06 03:00 PM

WET CHEMISTRY

Sample Report Summary

MRMW9SW20004F

SDG No.: 113285

Lab Sample ID: 662149

Date Received: 03/23/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Hydroxide Alkalinity | 03/28/06 | BLKAL032806D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Carbonate Alkalinity | 03/28/06 | BLKAL032806C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Bicarbonate Alkalinity | 03/28/06 | BLKAL032806B | ug/L | 1 | 1000 | 350000 | |
| 310.1 | Total Alkalinity | 03/28/06 | BLKAL032806A | ug/L | 1 | 1000 | 350000 | |

Printed on: 04/07/06 03:00 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW7SW20000

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113285

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 662150

Matrix: WATER

Client: ARGLAB

Date Received: 03/23/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 03/24/06 | BLKIC032406G | ug/L | 1 | 200 | 9760 | |
| 300.0 | Sulfate | 04/03/06 | BLKIC040306C | ug/L | 5 | 1000 | 25800 | |
| 300.0 | Nitrate as N | 04/03/06 | BLKIC040306A | ug/L | 5 | 1000 | 19800 | |
| 300.0 | O-Phosphate as P | 03/24/06 | BLKIC032406H | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 03/29/06 | BLKNN032906A | ug/L | 10 | 100 | 18400 | |
| 354.1 | Nitrite Nitrogen | 03/23/06 | BLKNI032306A | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 03/27/06 | BLKSU032706A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 03/31/06 | BLKTO033106B | ug/L | 1 | 1000 | 2000 | |

Printed on: 04/07/06 03:00 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW7SW20000F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113285

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 662151

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/23/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Hydroxide Alkalinity | 03/28/06 | BLKAL032806D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Carbonate Alkalinity | 03/28/06 | BLKAL032806C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Bicarbonate Alkalinity | 03/28/06 | BLKAL032806B | ug/L | 1 | 1000 | 304000 | |
| 310.1 | Total Alkalinity | 03/28/06 | BLKAL032806A | ug/L | 1 | 1000 | 304000 | |

Printed on: 04/07/06 03:00 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW11SW20001

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113285

Lab Code: STLVT

Case No.: MORRILL

Lab Sample ID: 662152

Matrix: WATER

Client: ARGLAB

Date Received: 03/23/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 03/24/06 | BLKIC032406G | ug/L | 1 | 200 | 8220 | |
| 300.0 | Sulfate | 04/03/06 | BLKIC040306C | ug/L | 5 | 1000 | 25200 | |
| 300.0 | Nitrate as N | 04/03/06 | BLKIC040306A | ug/L | 5 | 1000 | 21800 | |
| 300.0 | O-Phosphate as P | 03/24/06 | BLKIC032406H | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 03/30/06 | BLKNN033006B | ug/L | 20 | 200 | 20300 | |
| 354.1 | Nitrite Nitrogen | 03/23/06 | BLKNI032306A | ug/L | 1 | 5.0 | 5.2 | |
| 376.2 | Sulfide | 03/27/06 | BLKSU032706A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 03/31/06 | BLKTO033106B | ug/L | 1 | 1000 | 2190 | |

Printed on: 04/07/06 03:00 PM

WET CHEMISTRY

Sample Report Summary

MRMW11SW20001F

SDG No.: 113285

Lab Sample ID: 662153

Date Received: 03/23/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Hydroxide Alkalinity | 03/28/06 | BLKAL032806D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Carbonate Alkalinity | 03/28/06 | BLKAL032806C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Bicarbonate Alkalinity | 03/28/06 | BLKAL032806B | ug/L | 1 | 1000 | 316000 | |
| 310.1 | Total Alkalinity | 03/28/06 | BLKAL032806A | ug/L | 1 | 1000 | 316000 | |

Printed on: 04/07/06 03:00 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW5SW19996

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113285

Lab Code: STLVY

Case No.: MORRILL

Lab Sample ID: 662154

Matrix: WATER

Client: ARGLAB

Date Received: 03/23/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 03/24/06 | BLKIC032406G | ug/L | 1 | 200 | 13100 | |
| 300.0 | Sulfate | 04/03/06 | BLKIC040306C | ug/L | 5 | 1000 | 48500 | |
| 300.0 | Nitrate as N | 04/03/06 | BLKIC040306A | ug/L | 5 | 1000 | 22000 | |
| 300.0 | O-Phosphate as P | 03/24/06 | BLKIC032406H | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 03/30/06 | BLKNN033006B | ug/L | 20 | 200 | 20100 | |
| 354.1 | Nitrite Nitrogen | 03/23/06 | BLKNI032306A | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 03/27/06 | BLKSU032706A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 03/31/06 | BLKTO033106B | ug/L | 1 | 1000 | 2380 | |

Printed on: 04/07/06 03:00 PM

WET CHEMISTRY

Sample Report Summary

MRMW5SW19996F

SDG No.: 113285

Lab Sample ID: 662155

Date Received: 03/23/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Hydroxide Alkalinity | 03/28/06 | BLKAL032806D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Carbonate Alkalinity | 03/28/06 | BLKAL032806C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Bicarbonate Alkalinity | 03/28/06 | BLKAL032806B | ug/L | 1 | 1000 | 297000 | |
| 310.1 | Total Alkalinity | 03/28/06 | BLKAL032806A | ug/L | 1 | 1000 | 297000 | |

Printed on: 04/07/06 03:00 PM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRQCDUW20005

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113285

Lab Code: STLV

Case No.: MORRILL

Lab Sample ID: 662157

Matrix: WATER

Client: ARGLAB

Date Received: 03/23/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 03/24/06 | BLKIC032406G | ug/L | 1 | 200 | 8310 | |
| 300.0 | Sulfate | 04/03/06 | BLKIC040306C | ug/L | 5 | 1000 | 25200 | |
| 300.0 | Nitrate as N | 04/03/06 | BLKIC040306A | ug/L | 5 | 1000 | 21600 | |
| 300.0 | O-Phosphate as P | 03/24/06 | BLKIC032406H | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 03/30/06 | BLKNN033006B | ug/L | 20 | 200 | 20400 | |
| 354.1 | Nitrite Nitrogen | 03/23/06 | BLKNI032306A | ug/L | 1 | 5.0 | 6.1 | |
| 376.2 | Sulfide | 03/27/06 | BLKSU032706A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 03/31/06 | BLKTO033106B | ug/L | 1 | 1000 | 1880 | |

Printed on: 04/07/06 03:00 PM

Sample Report Summary

MRQCDUW20005F

SDG No.: 113285

Lab Sample ID: 662158

Date Received: 03/23/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Hydroxide Alkalinity | 03/28/06 | BLKAL032806D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Carbonate Alkalinity | 03/28/06 | BLKAL032806C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Bicarbonate Alkalinity | 03/28/06 | BLKAL032806B | ug/L | 1 | 1000 | 316000 | |
| 310.1 | Total Alkalinity | 03/28/06 | BLKAL032806A | ug/L | 1 | 1000 | 316000 | |

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MRMW1SW20008

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113285

Lab Code: STLVY

Case No.: MORRILL

Lab Sample ID: 662159

Matrix: WATER

Client: ARGLAB

Date Received: 03/23/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 04/03/06 | BLKIC040306B | ug/L | 10 | 2000 | 87000 | |
| 300.0 | Sulfate | 04/03/06 | BLKIC040306C | ug/L | 10 | 2000 | 39300 | |
| 300.0 | Nitrate as N | 04/03/06 | BLKIC040306A | ug/L | 2 | 400 | 15200 | |
| 300.0 | O-Phosphate as P | 03/24/06 | BLKIC032406H | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 03/29/06 | BLKNN032906A | ug/L | 10 | 100 | 14200 | |
| 354.1 | Nitrite Nitrogen | 03/23/06 | BLKNI032306A | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 03/27/06 | BLKSU032706A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 03/31/06 | BLKTO033106B | ug/L | 1 | 1000 | 1680 | |

Printed on: 04/07/06 03:00 PM

WET CHEMISTRY

Sample Report Summary

MRMW1SW20008F

SDG No.: 113285

Lab Sample ID: 662160

Date Received: 03/23/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Hydroxide Alkalinity | 03/28/06 | BLKAL032806D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Carbonate Alkalinity | 03/28/06 | BLKAL032806C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Bicarbonate Alkalinity | 03/28/06 | BLKAL032806B | ug/L | 1 | 1000 | 311000 | |
| 310.1 | Total Alkalinity | 03/28/06 | BLKAL032806A | ug/L | 1 | 1000 | 311000 | |



**Sample Data Summary Package
For Metals**

USEPA - CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: MORRILL SAS No.: _____ SDG No.: 113285
SOW No.: _____

| EPA Sample No. | Lab Sample ID. |
|-----------------------|-----------------|
| <u>MRMW11SW20001F</u> | <u>662153</u> |
| <u>MRMW1SW20008F</u> | <u>662160</u> |
| <u>MRMW1SW20008FD</u> | <u>662160DP</u> |
| <u>MRMW1SW20008FS</u> | <u>662160MS</u> |
| <u>MRMW5SW19996F</u> | <u>662155</u> |
| <u>MRMW7SW20000F</u> | <u>662151</u> |
| <u>MRMW9SW20004F</u> | <u>662149</u> |
| <u>MRQCDUW20005F</u> | <u>662158</u> |

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____
Date: _____ Title: _____

COVER PAGE - IN

USEPA - CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW11SW20001F

Lab Name: STL BURLINGTON Contract: 21005

Lab Code: STLVT Case No.: MORRILL SAS No.: _____ SDG No.: 113285

Matrix (soil/water): WATER Lab Sample ID: 662153

Level (low/med): LOW Date Received: 03/23/06

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 16.5 | U | | P |
| 7440-70-2 | Calcium | 90500 | | E | P |
| 7439-89-6 | Iron | 54.3 | U | | P |
| 7439-95-4 | Magnesium | 30500 | | E | P |
| 7439-96-5 | Manganese | 5.7 | B | | P |
| 7723-14-0 | Phosphorous | 18.4 | U | | P |
| 7440-09-7 | Potassium | 521 | U | | P |
| 7440-21-3 | Silicon | 7480 | | | P |
| 7440-23-5 | Sodium | 22600 | | | P |
| 7440-66-6 | Zinc | 16.0 | U | | P |

Color Before: colorless Clarity Before: clear Texture: _____

Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

Form I - IN

-1-

EPA SAMPLE NO.

MRMW1SW20008F

| | | | | |
|----------------------|-----------------------|----------------|-----------------|---------------------------------|
| Lab Name: | <u>STL BURLINGTON</u> | Contract: | <u>21005</u> | |
| Lab Code: | <u>STLVT</u> | Case No.: | <u>MORRILL</u> | SAS No.: <u>SDG No.: 113285</u> |
| Matrix (soil/water): | <u>WATER</u> | Lab Sample ID: | <u>662160</u> | |
| Level (low/med): | <u>LOW</u> | Date Received: | <u>03/23/06</u> | |
| % Solids: | <u>0.0</u> | | | |

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 16.5 | U | | P |
| 7440-70-2 | Calcium | 120000 | | E | P |
| 7439-89-6 | Iron | 54.3 | U | | P |
| 7439-95-4 | Magnesium | 27800 | | E | P |
| 7439-96-5 | Manganese | 0.80 | U | | P |
| 7723-14-0 | Phosphorous | 18.4 | U | | P |
| 7440-09-7 | Potassium | 606 | B | | P |
| 7440-21-3 | Silicon | 7450 | | | P |
| 7440-23-5 | Sodium | 37300 | | | P |
| 7440-66-6 | Zinc | 16.0 | U | | P |

Color Before: colorless Clarity Before: clear Texture: _____

Color After: colorless Clarity After: clear Artifacts: _____

Comments:

USEPA - CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW5SW19996F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: MORRILL SAS No.: _____ SDG No.: 113285
Matrix (soil/water): WATER Lab Sample ID: 662155
Level (low/med): LOW Date Received: 03/23/06
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 16.5 | U | | P |
| 7440-70-2 | Calcium | 99100 | | E | P |
| 7439-89-6 | Iron | 54.3 | U | | P |
| 7439-95-4 | Magnesium | 28400 | | E | P |
| 7439-96-5 | Manganese | 0.80 | U | | P |
| 7723-14-0 | Phosphorous | 18.4 | U | | P |
| 7440-09-7 | Potassium | 521 | U | | P |
| 7440-21-3 | Silicon | 7910 | | | P |
| 7440-23-5 | Sodium | 16300 | | | P |
| 7440-66-6 | Zinc | 16.0 | U | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____
Comments: _____

Form I - IN

USEPA - CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW7SW20000F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: MORRILL SAS No.: _____ SDG No.: 113285
Matrix (soil/water): WATER Lab Sample ID: 662151
Level (low/med): LOW Date Received: 03/23/06
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 16.5 | U | | P |
| 7440-70-2 | Calcium | 96900 | | E | P |
| 7439-89-6 | Iron | 54.3 | U | | P |
| 7439-95-4 | Magnesium | 20400 | | E | P |
| 7439-96-5 | Manganese | 0.80 | U | | P |
| 7723-14-0 | Phosphorous | 25.6 | B | | P |
| 7440-09-7 | Potassium | 521 | U | | P |
| 7440-21-3 | Silicon | 7260 | | | P |
| 7440-23-5 | Sodium | 20600 | | | P |
| 7440-66-6 | Zinc | 16.0 | U | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____
Comments: _____

Form I - IN

USEPA - CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MRMW9SW20004F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: MORRILL SAS No.: _____ SDG No.: 113285
Matrix (soil/water): WATER Lab Sample ID: 662149
Level (low/med): LOW Date Received: 03/23/06
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 19.7 | B | | P |
| 7440-70-2 | Calcium | 76900 | | E | P |
| 7439-89-6 | Iron | 54.3 | U | | P |
| 7439-95-4 | Magnesium | 33700 | | E | P |
| 7439-96-5 | Manganese | 70.1 | | | P |
| 7723-14-0 | Phosphorous | 18.4 | U | | P |
| 7440-09-7 | Potassium | 521 | U | | P |
| 7440-21-3 | Silicon | 8710 | | | P |
| 7440-23-5 | Sodium | 23600 | | | P |
| 7440-66-6 | Zinc | 16.0 | U | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____

Comments: _____

Form I - IN

-1-

EPA SAMPLE NO.

MROCDUW20005F

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 16.5 | U | | P |
| 7440-70-2 | Calcium | 96400 | | E | P |
| 7439-89-6 | Iron | 54.3 | U | | P |
| 7439-95-4 | Magnesium | 32400 | | E | P |
| 7439-96-5 | Manganese | 6.5 | B | | P |
| 7723-14-0 | Phosphorous | 19.9 | B | | P |
| 7440-09-7 | Potassium | 879 | B | | P |
| 7440-21-3 | Silicon | 7450 | | | P |
| 7440-23-5 | Sodium | 24000 | | | P |
| 7440-66-6 | Zinc | 16.0 | U | | P |

Comments: _____



RSK-175

SAMPLE DATA SUMMARY PACKAGE

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRMW1SW20008

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113285

Matrix: (soil/water) WATER

Lab Sample ID: 662159

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 27MA060933-R191

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | | Q |
|--------------|----------|--|---|---|
| 74-82-8----- | Methane | 2.0 | U | |
| 74-84-0----- | Ethane | 4.0 | U | |
| 74-85-1----- | Ethene | 3.0 | U | |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRMW5SW19996

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113285

Matrix: (soil/water) WATER

Lab Sample ID: 662154

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 27MA060933-R161

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | | Q |
|--------------|----------|--|---|---|
| 74-82-8----- | Methane | 2.0 | U | |
| 74-84-0----- | Ethane | 4.0 | U | |
| 74-85-1----- | Ethene | 3.0 | U | |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRMW7SW20000

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113285

Matrix: (soil/water) WATER

Lab Sample ID: 662150

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 27MA060933-R141

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | | Q |
|--------------|----------|--|---|---|
| 74-82-8----- | Methane | 2.0 | U | |
| 74-84-0----- | Ethane | 4.0 | U | |
| 74-85-1----- | Ethene | 3.0 | U | |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRMW9SW20004

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113285

Matrix: (soil/water) WATER

Lab Sample ID: 662148

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 27MA060933-R131

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|--------------|----------|--|---|
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRQCDUW20005

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113285

Matrix: (soil/water) WATER

Lab Sample ID: 662157

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 27MA060933-R181

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---------|----------|--|---|
|---------|----------|--|---|

| | | | |
|--------------|---------|-----|---|
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRQCTBW20009

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113285

Matrix: (soil/water) WATER

Lab Sample ID: 662156

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 27MA060933-R171

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTUPL0T ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Q

| | | |
|---------------------|-----|---|
| 74-82-8-----Methane | 2.0 | U |
| 74-84-0-----Ethane | 4.0 | U |
| 74-85-1-----Ethene | 3.0 | U |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRQCTBW20012

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113285

Matrix: (soil/water) WATER

Lab Sample ID: 662161

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 27MA060933-R201

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---------|----------|--|---|
|---------|----------|--|---|

| | | | |
|--------------|---------|-----|---|
| 74-82-8----- | Methane | 2.0 | U |
| 74-84-0----- | Ethane | 4.0 | U |
| 74-85-1----- | Ethene | 3.0 | U |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

RMW11SW20001

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MORRILL SAS No.:

SDG No.: 113285

Matrix: (soil/water) WATER

Lab Sample ID: 662152

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 27MA060933-R151

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Q

| | | |
|---------------------|-----|---|
| 74-82-8-----Methane | 2.0 | U |
| 74-84-0-----Ethane | 4.0 | U |
| 74-85-1-----Ethene | 3.0 | U |

FORM I VOA

April 10, 2006

Mr. Clyde Dennis
Argonne National Laboratory
9700 South Cass Avenue
Building 203, Office B149
Argonne, IL 60439

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

Re: Laboratory Project No. 21005
Case: MURDOCK; SDG: 113321

Dear Mr. Dennis:

Enclosed are analytical results for samples that were received by STL Burlington on March 24th, 2006. Laboratory identification numbers were assigned, and designated as follows:

| <u>Lab ID</u> | <u>Client Sample ID</u> | <u>Sample Date</u> | <u>Sample Matrix</u> |
|-----------------------------------|-----------------------------|------------------------|--------------------------|
| Received: 03/24/06 ETR No: 113321 | | | |
| 662361 | MR-QCDU-W-20016 | 03/23/06 | Water |
| 662362 | MR-QCDU-W-20016F | 03/23/06 | Filtrate |
| 662363 | MR-MW3S-W-19994 | 03/23/06 | Water |
| 662364 | MR-MW3S-W-19994F | 03/23/06 | Filtrate |
| 662365 | MR-QCTB-W-20017 | 03/23/06 | Water |

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes, although, for the ion chromatography analysis, the instrumentation has within it a pretreatment system that does provide filtration as a function of routine operation.

The primary analysis of the samples for nitrate nitrogen was performed in the context of USEPA Method 353.2 for nitrate/nitrite nitrogen, using preserved sample volumes, and USEPA Method 354.1 for nitrite. Secondly, results for nitrate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed background in the analysis of the method blank associated with the Method 353.2 analysis. The background concentration level approximated the established reporting limit, and was significantly less than the positive concentration levels in the field samples.

The primary analysis of the samples for phosphorus was performed in the context of SW846 Methods 3010A/6010B. Secondly, results for ortho-phosphate are reported from the analysis of

the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit. This is reflected in the positive result in the analysis of the method blank.

The samples were analyzed for methane, ethane, and ethene by Method RSK-175. Matrix spike and matrix spike duplicate analyses were not performed on samples in this sample set. A laboratory control sample was prepared and analyzed in association with the samples, and there was an acceptable recovery of the target analytes in that. The method blank that was analyzed in association with the samples was free of contamination.

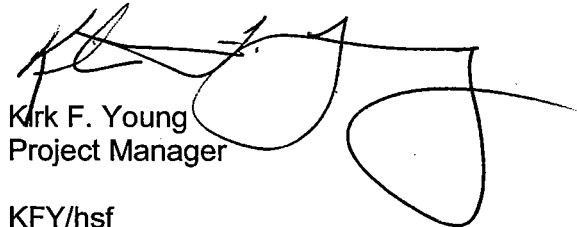
The samples were additionally analyzed for sulfate and chloride by USEPA Method 300.0, for alkalinity by USEPA Method 310.1, for sulfide by USEPA Method 376.2, for total organic carbon by USEPA Method 415.1, and for trace metals by SW846 Methods 3010A/6010B.

It should be noted that a matrix spike analysis was performed on sample MR-MW3S-W-19994 for ortho-phosphate by USEPA Method 300.0. The recovery of the spiked analyte in that analysis was 74 percent.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,



Kirk F. Young
Project Manager

KFY/hsf
Enclosure

STL Burlington Data Qualifier Definitions

Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- * Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

- P ICP-AES
MS ICP-MS
CV Cold Vapor AA
AS Semi-Automated Spectrophotometric

377.7

| ARGONNE NATIONAL LABORATORY CHAIN OF CUSTODY RECORD* | | | Shipping Container No. | |
|---|---------------------|----------------------|---|---|
| Shipping Info: | | | Shipping Info: | |
| ANL Field Contact (Name & Temporary Phone): | | | ANL Field Contact (Name & Temporary Phone): | |
| MATRIX: <u>Water</u> | | | <u>402-416-7255</u> | |
| RECEIVING LAB: <u>Severn Trent Lab</u> | | | | |
| PROJECT/SITE: <u>Mudrock NE-</u> | | | | |
| SAMPLER(S) (Signature): <u>Daryl Blev</u> | | | | |
| DATE OF COLLECTION | SAMPLE ID NUMBER(S) | Number of containers | ANALYSIS | |
| March 23-2006 | MR-GC04-U-20016 | 8 | TOC | ✓ |
| March 23-2006 | MR-MW35-U-19994 | 8 | TOC | ✓ |
| March 23-2006 | MR-GCTB-U-20017 | 2 | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | Alkalinity | ✓ |
| | | | Cations | ✓ |
| | | | Total | ✓ |
| | | | Sulfide | ✓ |
| | | | TOC | ✓ |
| | | | | |



**Sample Data Summary Package
For Wet Chemistry**

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MR-QCDU-W-20016

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113321

Lab Code: STLVLT

Case No.: MURDOCK

Lab Sample ID: 662361

Matrix: WATER

Client: ARGLAB

Date Received: 03/24/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 03/24/06 | BLKIC032406C | ug/L | 1 | 200 | 3870 | |
| 300.0 | Sulfate | 03/24/06 | BLKIC032406D | ug/L | 10 | 2000 | 22700 | |
| 300.0 | Nitrate as N | 03/24/06 | BLKIC032406E | ug/L | 10 | 2000 | 15400 | |
| 300.0 | O-Phosphate as P | 03/24/06 | BLKIC032406F | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 03/29/06 | BLKNN032906A | ug/L | 10 | 100 | 13800 | |
| 354.1 | Nitrite Nitrogen | 03/24/06 | BLKNI032406A | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 03/27/06 | BLKSU032706A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 04/03/06 | BLKTO040306A | ug/L | 1 | 1000 | 1510 | |

Printed on: 04/05/06 11:29 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MR-QCDU-W-20016F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113321

Lab Code: STLVT

Case No.: MURDOCK

Lab Sample ID: 662362

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/24/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Hydroxide Alkalinity | 03/28/06 | BLKAL032806D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Carbonate Alkalinity | 03/28/06 | BLKAL032806C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Bicarbonate Alkalinity | 03/28/06 | BLKAL032806B | ug/L | 1 | 1000 | 286000 | |
| 310.1 | Total Alkalinity | 03/28/06 | BLKAL032806A | ug/L | 1 | 1000 | 286000 | |

Printed on: 04/05/06 11:29 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MR-MW3S-W-19994

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113321

Lab Code: STLV

Case No.: MURDOCK

Lab Sample ID: 662363

Matrix: WATER

Client: ARGLAB

Date Received: 03/24/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|--------------------------|---------------------|------------------|-------|----|------|-------|-------|
| 300.0 | Chloride | 03/24/06 | BLKIC032406C | ug/L | 1 | 200 | 3850 | |
| 300.0 | Sulfate | 03/24/06 | BLKIC032406D | ug/L | 10 | 2000 | 22800 | |
| 300.0 | Nitrate as N | 03/24/06 | BLKIC032406E | ug/L | 10 | 2000 | 15200 | |
| 300.0 | O-Phosphate as P | 03/24/06 | BLKIC032406F | ug/L | 1 | 200 | 200 | U |
| 353.2 | Nitrate/Nitrite Nitrogen | 03/29/06 | BLKNN032906A | ug/L | 10 | 100 | 13400 | |
| 354.1 | Nitrite Nitrogen | 03/24/06 | BLKNI032406A | ug/L | 1 | 5.0 | 5.0 | U |
| 376.2 | Sulfide | 03/27/06 | BLKSU032706A | ug/L | 1 | 20.0 | 20.0 | U |
| 415.1 | Organic Carbon, Total | 04/03/06 | BLKTO040306A | ug/L | 1 | 1000 | 1950 | |

Printed on: 04/05/06 11:29 AM

WET CHEMISTRY

Sample Report Summary

Client Sample No.

MR-MW3S-W-19994F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113321

Lab Code: STLV

Case No.: MURDOCK

Lab Sample ID: 662364

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/24/06

% Solids:

| Method | Parameter | Analytical Run Date | Analytical Batch | Units | DF | RL | Conc. | Qual. |
|--------|------------------------|---------------------|------------------|-------|----|------|--------|-------|
| 310.1 | Hydroxide Alkalinity | 03/28/06 | BLKAL032806D | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Carbonate Alkalinity | 03/28/06 | BLKAL032806C | ug/L | 1 | 1000 | 1000 | U |
| 310.1 | Bicarbonate Alkalinity | 03/28/06 | BLKAL032806B | ug/L | 1 | 1000 | 287000 | |
| 310.1 | Total Alkalinity | 03/28/06 | BLKAL032806A | ug/L | 1 | 1000 | 287000 | |

Printed on: 04/05/06 11:29 AM



Sample Data Summary Package For Metals

USEPA-CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 21005Lab Code: STLVT Case No.: MURDOCK SAS No.: _____ SDG No.: 113321

SOW No.: _____

EPA Sample No.

MR-MW3S-W-19994FMR-QCDU-W-20016F

Lab Sample ID.

662364662362

Were ICP interelement corrections applied?

Yes/No YES

Were ICP background corrections applied?

Yes/No YESIf yes-were raw data generated before
application of background corrections?Yes/No NOComments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: _____

Date: _____

Title: _____

COVER PAGE - IN

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MR-MW3S-W-19994F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: MURDOCK SAS No.: _____ SDG No.: 113321
Matrix (soil/water): FILTRATE Lab Sample ID: 662364
Level (low/med): LOW Date Received: 3/24/2006
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 46.4 | U | | P |
| 7440-70-2 | Calcium | 90500 | | E | P |
| 7439-89-6 | Iron | 54.3 | U | | P |
| 7439-95-4 | Magnesium | 15500 | | E | P |
| 7439-96-5 | Manganese | 0.80 | U | | P |
| 7723-14-0 | Phosphorous | 18.4 | U | | P |
| 7440-09-7 | Potassium | 475 | B | | P |
| 7440-21-3 | Silicon | 7270 | | | P |
| 7440-23-5 | Sodium | 20100 | | | P |
| 7440-66-6 | Zinc | 16.0 | U | | P |

Color Before: colorless Clarity Before: clear Texture: _____
Color After: colorless Clarity After: clear Artifacts: _____
Comments: _____

Form I - IN

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MR-QCDU-W-20016F

Lab Name: STL BURLINGTON Contract: 21005
Lab Code: STLVT Case No.: MURDOCK SAS No.: _____ SDG No.: 113321
Matrix (soil/water): FILTRATE Lab Sample ID: 662362
Level (low/med): LOW Date Received: 3/24/2006
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-------------|---------------|---|---|---|
| 7429-90-5 | Aluminum | 46.4 | U | | P |
| 7440-70-2 | Calcium | 91800 | | E | P |
| 7439-89-6 | Iron | 54.3 | U | | P |
| 7439-95-4 | Magnesium | 15800 | | E | P |
| 7439-96-5 | Manganese | 0.80 | U | | P |
| 7723-14-0 | Phosphorous | 18.4 | B | | P |
| 7440-09-7 | Potassium | 756 | B | | P |
| 7440-21-3 | Silicon | 7310 | | | P |
| 7440-23-5 | Sodium | 20400 | | | P |
| 7440-66-6 | Zinc | 16.0 | U | | P |

Color Before: colorless Clarity Before: clear Texture: _____Color After: colorless Clarity After: clear Artifacts: _____Comments: _____

Form I - IN



RSK-175

SAMPLE DATA SUMMARY PACKAGE

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRMW3SW19994

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MURDOCK SAS No.:

SDG No.: 113321

Matrix: (soil/water) WATER

Lab Sample ID: 662363

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 29MA060948-R061

Level: (low/med) LOW

Date Received: 03/24/06

% Moisture: not dec. _____

Date Analyzed: 03/29/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | | Q |
|--------------|----------|--|---|---|
| 74-82-8----- | Methane | 2.0 | U | |
| 74-84-0----- | Ethane | 4.0 | U | |
| 74-85-1----- | Ethene | 3.0 | U | |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRQCDUW20016

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MURDOCK SAS No.:

SDG No.: 113321

Matrix: (soil/water) WATER

Lab Sample ID: 662361

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 29MA060948-R051

Level: (low/med) LOW

Date Received: 03/24/06

% Moisture: not dec. _____

Date Analyzed: 03/29/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | | Q |
|--------------|----------|--|---|---|
| 74-82-8----- | Methane | 2.0 | U | |
| 74-84-0----- | Ethane | 4.0 | U | |
| 74-85-1----- | Ethene | 3.0 | U | |

FORM I VOA

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

MRQCTBW20017

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: MURDOCK SAS No.:

SDG No.: 113321

Matrix: (soil/water) WATER

Lab Sample ID: 662365

Sample wt/vol: _____ (g/mL) ML

Lab File ID: 29MA060948-R071

Level: (low/med) LOW

Date Received: 03/24/06

% Moisture: not dec. _____

Date Analyzed: 03/29/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | | Q |
|--------------|----------|--|---|---|
| 74-82-8----- | Methane | 2.0 | U | |
| 74-84-0----- | Ethane | 4.0 | U | |
| 74-85-1----- | Ethene | 3.0 | U | |

FORM I VOA

ENVIROSYSTEMS, INC.

9200 Rumsey Road • Suite B102 • Columbia, Maryland 21045-1934
Phone (410) 964-0330 • Fax (410) 740-9306
Email: info@envsystems.com • Webpage: www.envsystems.com/envsys

May 19, 2006

Jorge S. Alvarado, Ph.D
Argonne National Laboratory
Environmental Research Division
Applied Geoscience and Environmental
Management Section
9700 South Cass Avenue, ER-203
Argonne, Illinois 60439

RE: ENVSYS Report 0605045

Dear Jorge:

Enclosed are the results of analysis for the samples received for volatile organics analysis by US EPA CLP SOW OLM04.3 with a lower reporting limit of 5ug/L.

Please do not hesitate to call me if you have any questions, comments, or require additional information.

Sincerely,



Mohan Khare, Ph.D
President/CEO

MK/pl

1. Narrative

00001

SDG NARRATIVE

LABORATORY NAME: ENVIROSYSTEMS, INC.

CLIENT: Argonne National Laboratory

DATE SAMPLES RECEIVED AT LABORATORY: 15 - 24 March 2006

SAMPLE ANALYSES INCLUDED IN THIS REPORT:

| Client# | Lab ID # | Analysis | Matrix |
|-------------------|------------|----------|--------|
| CNQCMW07-W-19888 | 0060315-01 | VOA | WATER |
| CNCQCTB-W-19894 | 0060315-02 | VOA | WATER |
| CNQCSB07R-W-19982 | 0060320-01 | VOA | WATER |
| CNQCTB-W-19984 | 0060320-02 | VOA | WATER |
| CNQCMW09-W-19977 | 0060320-03 | VOA | WATER |
| MRQCMW-11S-W-2006 | 0060328-01 | VOA | WATER |
| MRQCFB-W-2007 | 0060328-02 | VOA | WATER |
| MRMW3SW19994 | 0060329-01 | VOA | WATER |
| EVMW4W20117 | 0060329-02 | VOA | WATER |
| EVQCTBW26120 | 0060329-03 | VOA | WATER |
| EVPT1W20125 | 0060330-01 | VOA | WATER |
| EVQCTBW20126 | 0060330-02 | VOA | WATER |

Matrix spike/matrix spike duplicate analysis was performed on sample EVMW4-W-20117.

Samples for this SDG are analyzed by EPA SOW OLM04.3 for multi-media multi-concentration organics. Sample detection limits have been modified to meet client requirements.

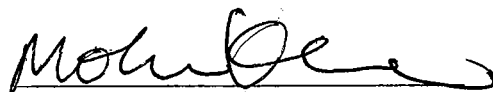
The cooler temperature was measured to be 2-4 degrees C.

The volatile analysis was performed on a Agilent 5975 GC/MS using a Restek RTX-624 20 meter column with an inner diameter of 0.18 mm and a 1 micron film thickness. The trap used with the autosampler is a 30 cm EST K Trap (VOCARB 3000) packed with Carboxen B/Carboxen 1000 & 1001.

The surrogate's recoveries were within the QC limits for all samples and QC samples except for one.

The MS/MSD recoveries were within acceptable range for all compounds.

I CERTIFY THAT THIS DATA PACKAGE IS IN COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE CONTRACT, BOTH TECHNICALLY AND FOR COMPLETENESS, FOR OTHER THAN THE CONDITIONS DETAILED ABOVE. RELEASE OF THE DATA CONTAINED IN THIS HARDCOPY DATA PACKAGE HAS BEEN AUTHORIZED BY THE LABORATORY MANAGER OR HIS/HER DESIGNEE, AS VERIFIED BY THE FOLLOWING SIGNATURE:



Dr. Mohan Khare
president/CEO

DATE:

5/19/08
19 MAY 2006

01A

2. SDG Cover Sheet / Traffic Report

| MATRIX: | | WATER | | ARGONNE NATIONAL LABORATORY CHAIN OF CUSTODY RECORD* | | Shipping Container No. | |
|--|--------------------|--|-----------------------|---|--|---|--|
| RECEIVING LAB: Enviro Systems | | | | ANALYSIS | | Shipping Info: | |
| PROJECT/SITE: Centralia | | | | | | ANL Field Contact (Name & Temporary Phone): <u>Barney Washold 630-252-7698</u> | |
| SAMPLER(S) (Signature) | DATE OF COLLECTION | SAMPLE ID NUMBER(S) | Number of con-tainers | | | Remarks | |
| <u>BW Washold</u> | 14 MAR 06 | CNQC MW07-W-19888 Z | ✓ | | | Contact = JORGE ALVARADO at ANL | |
| | 14 MAR 06 | CNQC TB -W-19894 Z | ✓ | | | | |
| BWC | | | | | | | |
| BSM | | | | | | | |
| Relinquished by (Signature) Date Time Received by (Signature) <u>BW Washold</u> 14 MAR 06 1700 HR <u>Paul Ford</u> 3/15/05 10:30 AM | | | | | | | |
| Received for Laboratory by Date Time Remarks <u>Paul Ford</u> 3/15/05 10:30 Cooler Temp 4°C | | | | | | | |
| FOR LAB USE ONLY | | | | | | | |
| Y | N | Custody seal was intact when shipment received. | | | | | |
| ✓ | | Sample containers were intact when received. | | | | | |
| ✓ | | Shipment was at required temperature when received. 70°C | | | | | |
| cb | | Sample labels, Tags and COC agree. | | | | | |
| Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439 | | | | | | | |

3770

[illegible]

ER-160 (4-01)

05

Temp 2°C cooler

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MRQCMW-1
1S-W-2006

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 06032801

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032801

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

| | | | |
|-----------|---------------------------------------|-----|----|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 74-87-3 | Chloromethane | 5.0 | U |
| 75-01-4 | Vinyl Chloride | 5.0 | U |
| 74-83-9 | Bromomethane | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-69-4 | Trichlorofluoromethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | U |
| 67-64-1 | Acetone | 2.5 | JB |
| 75-15-0 | Carbon Disulfide | 5.0 | U |
| 79-20-9 | Methyl Acetate | 5.0 | U |
| 75-09-2 | Methylene Chloride | 1.6 | JB |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 1634-04-4 | Methyl tert-Butyl Ether | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 78-93-3 | 2-Butanone | 5.0 | U |
| 67-66-3 | Chloroform | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 110-82-7 | Cyclohexane | 5.0 | U |
| 56-23-5 | Carbon Tetrachloride | 30 | |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |

00071

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MRQCMW-1
1S-W-2006

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 06032801

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032801

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

| CAS NO. | COMPOUND | UG/L | Q |
|------------|-----------------------------|------|---|
| 79-01-6 | Trichloroethene | 5.0 | U |
| 108-87-2 | Methylcyclohexane | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 75-27-4 | Bromodichloromethane | 5.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 5.0 | U |
| 108-88-3 | Toluene | 5.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 591-78-6 | 2-Hexanone | 5.0 | U |
| 124-48-1 | Dibromochloromethane | 5.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 100-41-4 | Ethylbenzene | 5.0 | U |
| 1330-20-7 | Xylene (Total) | 5.0 | U |
| 100-42-5 | Styrene | 5.0 | U |
| 75-25-2 | Bromoform | 5.0 | U |
| 98-82-8 | Isopropylbenzene | 5.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | U |

00072

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MRQCMW-1
1S-W-2006

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 06032801

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032801

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------|-------|------------|-------|
| ===== | ===== | ===== | ===== | ===== |
| 1. _____ | _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ | _____ |
| 3. _____ | _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ | _____ |
| 5. _____ | _____ | _____ | _____ | _____ |
| 6. _____ | _____ | _____ | _____ | _____ |
| 7. _____ | _____ | _____ | _____ | _____ |
| 8. _____ | _____ | _____ | _____ | _____ |
| 9. _____ | _____ | _____ | _____ | _____ |
| 10. _____ | _____ | _____ | _____ | _____ |
| 11. _____ | _____ | _____ | _____ | _____ |
| 12. _____ | _____ | _____ | _____ | _____ |
| 13. _____ | _____ | _____ | _____ | _____ |
| 14. _____ | _____ | _____ | _____ | _____ |
| 15. _____ | _____ | _____ | _____ | _____ |
| 16. _____ | _____ | _____ | _____ | _____ |
| 17. _____ | _____ | _____ | _____ | _____ |
| 18. _____ | _____ | _____ | _____ | _____ |
| 19. _____ | _____ | _____ | _____ | _____ |
| 20. _____ | _____ | _____ | _____ | _____ |
| 21. _____ | _____ | _____ | _____ | _____ |
| 22. _____ | _____ | _____ | _____ | _____ |
| 23. _____ | _____ | _____ | _____ | _____ |
| 24. _____ | _____ | _____ | _____ | _____ |
| 25. _____ | _____ | _____ | _____ | _____ |
| 26. _____ | _____ | _____ | _____ | _____ |
| 27. _____ | _____ | _____ | _____ | _____ |
| 28. _____ | _____ | _____ | _____ | _____ |
| 29. _____ | _____ | _____ | _____ | _____ |
| 30. _____ | _____ | _____ | _____ | _____ |

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MRQCFB-W-2007

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 06032802

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032802

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) | UG/L | Q |
|---------|----------|---|------|---|
|---------|----------|---|------|---|

| | | | | |
|-----------|---------------------------------------|-----|----|--|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U | |
| 74-87-3 | Chloromethane | 5.0 | U | |
| 75-01-4 | Vinyl Chloride | 5.0 | U | |
| 74-83-9 | Bromomethane | 5.0 | U | |
| 75-00-3 | Chloroethane | 5.0 | U | |
| 75-69-4 | Trichlorofluoromethane | 5.0 | U | |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U | |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | U | |
| 67-64-1 | Acetone | 4.9 | JB | |
| 75-15-0 | Carbon Disulfide | 5.0 | U | |
| 79-20-9 | Methyl Acetate | 5.0 | U | |
| 75-09-2 | Methylene Chloride | 1.7 | JB | |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U | |
| 1634-04-4 | Methyl tert-Butyl Ether | 5.0 | U | |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U | |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U | |
| 78-93-3 | 2-Butanone | 5.0 | U | |
| 67-66-3 | Chloroform | 5.0 | U | |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U | |
| 110-82-7 | Cyclohexane | 5.0 | U | |
| 56-23-5 | Carbon Tetrachloride | 5.0 | U | |
| 71-43-2 | Benzene | 5.0 | U | |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U | |

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MRQCFB-W-2007

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 06032802

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032802

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) | UG/L | Q |
|------------|-----------------------------|---|------|---|
| 79-01-6 | Trichloroethene | 5.0 | U | |
| 108-87-2 | Methylcyclohexane | 5.0 | U | |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U | |
| 75-27-4 | Bromodichloromethane | 5.0 | U | |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.0 | U | |
| 108-10-1 | 4-Methyl-2-Pentanone | 5.0 | U | |
| 108-88-3 | Toluene | 5.0 | U | |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.0 | U | |
| 79-00-5 | 1,1,2-Trichloroethane | 5.0 | U | |
| 127-18-4 | Tetrachloroethene | 5.0 | U | |
| 591-78-6 | 2-Hexanone | 5.0 | U | |
| 124-48-1 | Dibromochloromethane | 5.0 | U | |
| 106-93-4 | 1,2-Dibromoethane | 5.0 | U | |
| 108-90-7 | Chlorobenzene | 5.0 | U | |
| 100-41-4 | Ethylbenzene | 5.0 | U | |
| 1330-20-7 | Xylene (Total) | 5.0 | U | |
| 100-42-5 | Styrene | 5.0 | U | |
| 75-25-2 | Bromoform | 5.0 | U | |
| 98-82-8 | Isopropylbenzene | 5.0 | U | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.0 | U | |
| 541-73-1 | 1,3-Dichlorobenzene | 5.0 | U | |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U | |
| 95-50-1 | 1,2-Dichlorobenzene | 5.0 | U | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 | U | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | U | |

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MRQCFB-W-2007

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 06032802

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032802

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------|-------|------------|-------|
| ===== | ===== | ===== | ===== | ===== |
| 1. _____ | _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ | _____ |
| 3. _____ | _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ | _____ |
| 5. _____ | _____ | _____ | _____ | _____ |
| 6. _____ | _____ | _____ | _____ | _____ |
| 7. _____ | _____ | _____ | _____ | _____ |
| 8. _____ | _____ | _____ | _____ | _____ |
| 9. _____ | _____ | _____ | _____ | _____ |
| 10. _____ | _____ | _____ | _____ | _____ |
| 11. _____ | _____ | _____ | _____ | _____ |
| 12. _____ | _____ | _____ | _____ | _____ |
| 13. _____ | _____ | _____ | _____ | _____ |
| 14. _____ | _____ | _____ | _____ | _____ |
| 15. _____ | _____ | _____ | _____ | _____ |
| 16. _____ | _____ | _____ | _____ | _____ |
| 17. _____ | _____ | _____ | _____ | _____ |
| 18. _____ | _____ | _____ | _____ | _____ |
| 19. _____ | _____ | _____ | _____ | _____ |
| 20. _____ | _____ | _____ | _____ | _____ |
| 21. _____ | _____ | _____ | _____ | _____ |
| 22. _____ | _____ | _____ | _____ | _____ |
| 23. _____ | _____ | _____ | _____ | _____ |
| 24. _____ | _____ | _____ | _____ | _____ |
| 25. _____ | _____ | _____ | _____ | _____ |
| 26. _____ | _____ | _____ | _____ | _____ |
| 27. _____ | _____ | _____ | _____ | _____ |
| 28. _____ | _____ | _____ | _____ | _____ |
| 29. _____ | _____ | _____ | _____ | _____ |
| 30. _____ | _____ | _____ | _____ | _____ |

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MRMW3S-W-19994

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 06032901

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032901

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/L Q

| | | | |
|-----------|---------------------------------------|-----|----|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 74-87-3 | Chloromethane | 5.0 | U |
| 75-01-4 | Vinyl Chloride | 5.0 | U |
| 74-83-9 | Bromomethane | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-69-4 | Trichlorofluoromethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | U |
| 67-64-1 | Acetone | 2.1 | JB |
| 75-15-0 | Carbon Disulfide | 5.0 | U |
| 79-20-9 | Methyl Acetate | 5.0 | U |
| 75-09-2 | Methylene Chloride | 1.6 | JB |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 1634-04-4 | Methyl tert-Butyl Ether | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 78-93-3 | 2-Butanone | 5.0 | U |
| 67-66-3 | Chloroform | 2.1 | J |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 110-82-7 | Cyclohexane | 5.0 | U |
| 56-23-5 | Carbon Tetrachloride | 62 | |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |

00090

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MRMW3S-W-19994

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 06032901

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032901

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

| CAS NO. | COMPOUND | | |
|------------|-----------------------------|-----|---|
| 79-01-6 | Trichloroethene | 5.0 | U |
| 108-87-2 | Methylcyclohexane | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 75-27-4 | Bromodichloromethane | 5.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 5.0 | U |
| 108-88-3 | Toluene | 5.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 591-78-6 | 2-Hexanone | 5.0 | U |
| 124-48-1 | Dibromochloromethane | 5.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 100-41-4 | Ethylbenzene | 5.0 | U |
| 1330-20-7 | Xylene (Total) | 5.0 | U |
| 100-42-5 | Styrene | 5.0 | U |
| 75-25-2 | Bromoform | 5.0 | U |
| 98-82-8 | Isopropylbenzene | 5.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | U |

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MRMW3S-W-19994

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 06032901

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032901

Level: (low/med) LOW

Date Received: 03/23/06

% Moisture: not dec. _____

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------|-------|------------|-------|
| ===== | ===== | ===== | ===== | ===== |
| 1. _____ | _____ | _____ | _____ | _____ |
| 2. _____ | _____ | _____ | _____ | _____ |
| 3. _____ | _____ | _____ | _____ | _____ |
| 4. _____ | _____ | _____ | _____ | _____ |
| 5. _____ | _____ | _____ | _____ | _____ |
| 6. _____ | _____ | _____ | _____ | _____ |
| 7. _____ | _____ | _____ | _____ | _____ |
| 8. _____ | _____ | _____ | _____ | _____ |
| 9. _____ | _____ | _____ | _____ | _____ |
| 10. _____ | _____ | _____ | _____ | _____ |
| 11. _____ | _____ | _____ | _____ | _____ |
| 12. _____ | _____ | _____ | _____ | _____ |
| 13. _____ | _____ | _____ | _____ | _____ |
| 14. _____ | _____ | _____ | _____ | _____ |
| 15. _____ | _____ | _____ | _____ | _____ |
| 16. _____ | _____ | _____ | _____ | _____ |
| 17. _____ | _____ | _____ | _____ | _____ |
| 18. _____ | _____ | _____ | _____ | _____ |
| 19. _____ | _____ | _____ | _____ | _____ |
| 20. _____ | _____ | _____ | _____ | _____ |
| 21. _____ | _____ | _____ | _____ | _____ |
| 22. _____ | _____ | _____ | _____ | _____ |
| 23. _____ | _____ | _____ | _____ | _____ |
| 24. _____ | _____ | _____ | _____ | _____ |
| 25. _____ | _____ | _____ | _____ | _____ |
| 26. _____ | _____ | _____ | _____ | _____ |
| 27. _____ | _____ | _____ | _____ | _____ |
| 28. _____ | _____ | _____ | _____ | _____ |
| 29. _____ | _____ | _____ | _____ | _____ |
| 30. _____ | _____ | _____ | _____ | _____ |

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EVQCTB-W-26120

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 06032903

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032903

Level: (low/med) LOW

Date Received: 03/24/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

| | | | |
|-----------|---------------------------------------|-----|----|
| 75-71-8 | Dichlorodifluoromethane | 5.0 | U |
| 74-87-3 | Chloromethane | 5.0 | U |
| 75-01-4 | Vinyl Chloride | 5.0 | U |
| 74-83-9 | Bromomethane | 5.0 | U |
| 75-00-3 | Chloroethane | 5.0 | U |
| 75-69-4 | Trichlorofluoromethane | 5.0 | U |
| 75-35-4 | 1,1-Dichloroethene | 5.0 | U |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 5.0 | U |
| 67-64-1 | Acetone | 5.4 | B |
| 75-15-0 | Carbon Disulfide | 5.0 | U |
| 79-20-9 | Methyl Acetate | 5.0 | U |
| 75-09-2 | Methylene Chloride | 1.8 | JB |
| 156-60-5 | trans-1,2-Dichloroethene | 5.0 | U |
| 1634-04-4 | Methyl tert-Butyl Ether | 5.0 | U |
| 75-34-3 | 1,1-Dichloroethane | 5.0 | U |
| 156-59-2 | cis-1,2-Dichloroethene | 5.0 | U |
| 78-93-3 | 2-Butanone | 2.7 | J |
| 67-66-3 | Chloroform | 5.0 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5.0 | U |
| 110-82-7 | Cyclohexane | 5.0 | U |
| 56-23-5 | Carbon Tetrachloride | 5.0 | U |
| 71-43-2 | Benzene | 5.0 | U |
| 107-06-2 | 1,2-Dichloroethane | 5.0 | U |

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EVQCTB-W-26120

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 06032903

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032903

Level: (low/med) LOW

Date Received: 03/24/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

| CAS NO. | COMPOUND | UG/L | Q |
|------------|-----------------------------|------|---|
| 79-01-6 | Trichloroethene | 5.0 | U |
| 108-87-2 | Methylcyclohexane | 5.0 | U |
| 78-87-5 | 1,2-Dichloropropane | 5.0 | U |
| 75-27-4 | Bromodichloromethane | 5.0 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5.0 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 5.0 | U |
| 108-88-3 | Toluene | 5.0 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5.0 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5.0 | U |
| 127-18-4 | Tetrachloroethene | 5.0 | U |
| 591-78-6 | 2-Hexanone | 5.0 | U |
| 124-48-1 | Dibromochloromethane | 5.0 | U |
| 106-93-4 | 1,2-Dibromoethane | 5.0 | U |
| 108-90-7 | Chlorobenzene | 5.0 | U |
| 100-41-4 | Ethylbenzene | 5.0 | U |
| 1330-20-7 | Xylene (Total) | 5.0 | U |
| 100-42-5 | Styrene | 5.0 | U |
| 75-25-2 | Bromoform | 5.0 | U |
| 98-82-8 | Isopropylbenzene | 5.0 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.0 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 5.0 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 5.0 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 5.0 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 5.0 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.0 | U |

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EVQCTB-W-26120

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 06032903

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032903

Level: (low/med) LOW

Date Received: 03/24/06

% Moisture: not dec. _____

Date Analyzed: 03/27/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------|----|------------|---|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |
| 6. | | | | |
| 7. | | | | |
| 8. | | | | |
| 9. | | | | |
| 10. | | | | |
| 11. | | | | |
| 12. | | | | |
| 13. | | | | |
| 14. | | | | |
| 15. | | | | |
| 16. | | | | |
| 17. | | | | |
| 18. | | | | |
| 19. | | | | |
| 20. | | | | |
| 21. | | | | |
| 22. | | | | |
| 23. | | | | |
| 24. | | | | |
| 25. | | | | |
| 26. | | | | |
| 27. | | | | |
| 28. | | | | |
| 29. | | | | |
| 30. | | | | |

Client Name: Argonne National Laboratory
Contact: Jorge Al Varado
Address: 9700 Cass Street
Bldg. 201, OCF-PRO
Argonne, IL 60439

Page: Page 1 of 8
Lab Proj #: P0509252
Report Date: 09/23/05
Client Proj Name: Morrill
Client Proj #: Morrill

Laboratory Results

Total pages in data package: 9

| <u>Lab Sample #</u> | <u>Client Sample ID</u> |
|---------------------|-------------------------|
| P0509252-01 | MRMW07S-A-19258 |
| P0509252-02 | MRMW1S-A-19259 |
| P0509252-03 | MRMW5S-A-19260 |
| P0509252-04 | MRMW3S-A-19261 |
| P0509252-05 | MRMW4S-A-19262 |
| P0509252-06 | MRMW2S-A-19264 |
| P0509252-07 | TRIP BLANK |

Microseeps test results meet all the requirements of the NELAC standards.

Approved By: 

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Argonne National Laboratory
Contact: Jorge Al Varado
Address: 9700 Cass Street
Bldg. 201, OCF-PRO
Argonne, IL 60439

Page: Page 2 of 8
Lab Proj #: P0509252
Report Date: 09/23/05
Client Proj Name: Morrill
Client Proj #: Morrill

| <u>Sample Description</u> | <u>Matrix</u> | <u>Lab Sample #</u> | <u>Sampled Date/Time</u> | <u>Received</u> | | |
|---------------------------|---------------|---------------------|--------------------------|------------------|----------------------|-----------|
| MRMW07S-A-19258 | Vapor | P0509252-01 | 12 Sep. 05 17:05 | 16 Sep. 05 13:00 | | |
| <u>Analyte(s)</u> | <u>Result</u> | <u>PQL</u> | <u>Units</u> | <u>Method #</u> | <u>Analysis Date</u> | <u>By</u> |
| <u>RiskAnalysis</u> | | | | | | |
| Hydrogen | 7.200 | 1.000 | nM | AM20GAX | 9/21/05 | bc |



N - NELAC certified analysis

Client Name: Argonne National Laboratory
Contact: Jorge Al Varado
Address: 9700 Cass Street
Bldg. 201, OCF-PRO
Argonne, IL 60439

Page: Page 3 of 8
Lab Proj #: P0509252
Report Date: 09/23/05
Client Proj Name: Morrill
Client Proj #: Morrill

| | | | | | | |
|---------------------------|---------------|---------------------|--------------------------|------------------|----------------------|-----------|
| <u>Sample Description</u> | <u>Matrix</u> | <u>Lab Sample #</u> | <u>Sampled Date/Time</u> | <u>Received</u> | | |
| MRMW1S-A-19259 | Vapor | P0509252-02 | 13 Sep. 05 9:30 | 16 Sep. 05 13:00 | | |
| <u>Analyte(s)</u> | <u>Result</u> | <u>PQL</u> | <u>Units</u> | <u>Method #</u> | <u>Analysis Date</u> | <u>By</u> |
| <u>RiskAnalysis</u> | | | | | | |
| Hydrogen | 2.700 | 1.000 | nM | AM20GAX | 9/21/05 | bc |



Client Name: Argonne National Laboratory
Contact: Jorge Al Varado
Address: 9700 Cass Street
Bldg. 201, OCF-PRO
Argonne, IL 60439

Page: Page 4 of 8
Lab Proj #: P0509252
Report Date: 09/23/05
Client Proj Name: Morrill
Client Proj #: Morrill

| | | | | | | |
|---|------------------------|------------------------------------|--|-------------------------------------|----------------------|-----------|
| <u>Sample Description</u> MRMW5S-A-19260 | <u>Matrix</u> Vapor | <u>Lab Sample #</u> P0509252-03 | <u>Sampled Date/Time</u> 13 Sep. 05 11:45 | <u>Received</u> 16 Sep. 05 13:00 | | |
| <u>Analyte(s)</u> | <u>Result</u> | <u>PQL</u> | <u>Units</u> | <u>Method #</u> | <u>Analysis Date</u> | <u>By</u> |
| <u>RiskAnalysis</u> Hydrogen | 31.000 | 1.000 | nM | AM20GAX | 9/21/05 | bc |



N - NELAC certified analysis

Client Name: Argonne National Laboratory
Contact: Jorge Al Varado
Address: 9700 Cass Street
Bldg. 201, OCF-PRO
Argonne, IL 60439

Page: Page 5 of 8
Lab Proj #: P0509252
Report Date: 09/23/05
Client Proj Name: Morrill
Client Proj #: Morrill

| <u>Sample Description</u> | <u>Matrix</u> | <u>Lab Sample #</u> | <u>Sampled Date/Time</u> | <u>Received</u> | | |
|---------------------------|---------------|---------------------|--------------------------|------------------|----------------------|-----------|
| MRMW3S-A-19261 | Vapor | P0509252-04 | 13 Sep. 05 16:10 | 16 Sep. 05 13:00 | | |
| <u>Analyte(s)</u> | <u>Result</u> | <u>PQL</u> | <u>Units</u> | <u>Method #</u> | <u>Analysis Date</u> | <u>By</u> |
| <u>RiskAnalysis</u> | | | | | | |
| Hydrogen | 2.800 | 1.000 | nM | AM20GAX | 9/21/05 | bc |



Client Name: Argonne National Laboratory
Contact: Jorge Al Varado
Address: 9700 Cass Street
Bldg. 201, OCF-PRO
Argonne, IL 60439

Page: Page 6 of 8
Lab Proj #: P0509252
Report Date: 09/23/05
Client Proj Name: Morrill
Client Proj #: Morrill

| | | | | | | |
|---|------------------------|------------------------------------|--|-------------------------------------|----------------------|-----------|
| <u>Sample Description</u> MRMW4S-A-19262 | <u>Matrix</u> Vapor | <u>Lab Sample #</u> P0509252-05 | <u>Sampled Date/Time</u> 13 Sep. 05 17:45 | <u>Received</u> 16 Sep. 05 13:00 | | |
| <u>Analyte(s)</u> | <u>Result</u> | <u>PQL</u> | <u>Units</u> | <u>Method #</u> | <u>Analysis Date</u> | <u>By</u> |
| <u>RiskAnalysis</u> Hydrogen | 8.500 | 1.000 | nM | AM20GAX | 9/21/05 | bc |



Client Name: Argonne National Laboratory
Contact: Jorge Al Varado
Address: 9700 Cass Street
Bldg. 201, OCF-PRO
Argonne, IL 60439

Page: Page 7 of 8
Lab Proj #: P0509252
Report Date: 09/23/05
Client Proj Name: Morrill
Client Proj #: Morrill

| | | | | | | |
|---------------------------|---------------|---------------------|--------------------------|------------------|----------------------|-----------|
| <u>Sample Description</u> | <u>Matrix</u> | <u>Lab Sample #</u> | <u>Sampled Date/Time</u> | <u>Received</u> | | |
| MRMW2S-A-19264 | Vapor | P0509252-06 | 14 Sep. 05 10:20 | 16 Sep. 05 13:00 | | |
| <u>Analyte(s)</u> | <u>Result</u> | <u>PQL</u> | <u>Units</u> | <u>Method #</u> | <u>Analysis Date</u> | <u>By</u> |
| <u>RiskAnalysis</u> | | | | | | |
| Hydrogen | 2.400 | 1.000 | nM | AM20GAX | 9/21/05 | bc |



Client Name: Argonne National Laboratory
Contact: Jorge Al Varado
Address: 9700 Cass Street
Bldg. 201, OCF-PRO
Argonne, IL 60439

Page: Page 8 of 8
Lab Proj #: P0509252
Report Date: 09/23/05
Client Proj Name: Morrill
Client Proj #: Morrill

| <u>Sample Description</u> | <u>Matrix</u> | <u>Lab Sample #</u> | <u>Sampled Date/Time</u> | <u>Received</u> | | |
|---------------------------------|---------------|---------------------|--------------------------|------------------|----------------------|-----------|
| TRIP BLANK | Vapor | P0509252-07 | 14 Sep. 05 | 16 Sep. 05 13:00 | | |
| <u>Analyte(s)</u> | <u>Result</u> | <u>PQL</u> | <u>Units</u> | <u>Method #</u> | <u>Analysis Date</u> | <u>By</u> |
| <u>RiskAnalysis</u> Hydrogen | <1.000 | 1.000 | nM | AM20GAX | 9/21/05 | bc |



CHAIN - OF - CUSTODY RECORD

Fax No. : (412) 826-3433

Results to : Sorje
Alvarado
(630 252 5111)

Invoice to : per contrac

Sampler's signature:

[illegible]

| Relinquished by : | Company : | Date : | Time : | Received by : | Company : | Date : | Time : |
|-------------------|-----------|----------|---------|---------------|-----------|----------|--------|
| Burtonhold | ANL | 12-05-05 | 1100 HR | [Signature] | ANL | 12-05-05 | 1038 |
| Relinquished by : | Company : | Date : | Time : | Received by : | Company : | Date : | Time : |
| Relinquished by : | Company : | Date : | Time : | Received by : | Company : | Date : | Time : |

WHITE COPY : Accompany Samples

YELLOW COPY : Laboratory File

PINK COPY : Submitter

Supplement 5:

Waste Characterization Data and Disposal Authorization



K A N S A S

RODERICK L. BREMBY, SECRETARY

KATHLEEN SEBELIUS, GOVERNOR

DEPARTMENT OF HEALTH AND ENVIRONMENT

June 8, 2006

Ms. Lisa Larsen
Larsen & Associates, Inc.
PO Box 1447
Lawrence, KS. 66044

RE: Special Waste Disposal Authorization Number 06-0581

THIS AUTHORIZATION EXPIRES December 8, 2006.

Dear Ms. Larsen :

We have considered your request for disposal of sixteen (16) drums of soil cuttings from monitoring well installation at USDA, Everest, KS. (Analysis provided)

Based solely on the analysis provided, the waste is not a characteristic hazardous waste with respect to the constituents tested. As stated in K.A.R.28-31-4(b), it is the responsibility of the generator to determine whether or not a waste is a hazardous waste by either knowledge of process or by proper testing by a KDHE certified lab. If there are questions as to the status of this waste, the department suggests the facility contact the Kansas Department of Health and Environment at telephone 785-842-4600. **If Larsen & Associates, Inc. is confident the material for disposal is not a hazardous waste for any characteristic or listed constituent not included in the testing, the following applies.**

Approval is given to dispose of this waste at the Rolling Meadows landfill, operating under Kansas Permit 0342, provided the following conditions are met:

1. Approval to deliver the waste must be obtained from the landfill operator prior to transporting the waste to the landfill. The final decision on whether to accept or reject the waste rests with the landfill operator. Please contact Special Waste Department, telephone 1-800-963-4776, to obtain approval. If the landfill operator refuses to accept this waste, you should contact us to determine alternate disposal options.
2. The waste must be transported separately to the landfill and be identified to the operator upon delivery.
3. Kansas Administrative Regulation 28-29-108(r) (12) and (13) requires solid waste disposal facilities to maintain a log of commercial or industrial wastes received such as sludges, barreled wastes, and special wastes. The log must indicate the source and quantity of waste and the disposal location thereof. The industrial waste authorization number should be used as identification when entering the shipment into the log.

DIVISION OF ENVIRONMENT

BUREAU OF WASTE MANAGEMENT

CURTIS STATE OFFICE BUILDING, 1000 SW JACKSON ST., STE.320, TOPEKA, KS 66612-1366

Voice 785-296-1120 Fax 785-296-8909 <http://www.kdhe.state.ks.us/waste>

4. This approval is valid for disposal of the waste described and in the amount shown above. If additional shipments are required, you must contact us to receive another disposal authorization.
5. Operating standards as defined by K.A.R. 28-29-108(k) prohibit the disposal of liquid waste. "Liquid waste" means any waste material that is determined to contain "free liquids" as defined by method 9095A, revision 1, paint filter liquids test, as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Pub. No. SW-846 dated December 1996. **For purposes of this disposal authorization, all waste for disposal must be able to pass the "paint filter test".**
6. Any change in the process producing this waste, any change in the materials used in producing this waste or any other change to this waste stream requires that a new Special Waste Disposal Authorization be obtained prior to disposal.

If you have any questions, feel free to contact me at 785-296-1600.

Sincerely,



Tony Guy for
Jim Rudeen, Chief
Bureau of Waste Management
Waste Reduction, Compliance, and Enforcement

ABG

C Special Waste Department
F, Y

Requester phone: 785 841-8707

M.D. Chemical and Testing, Inc.
P.O. Box 19321, Forbes Field, Bldg 281, Topeka, KS 66619
Kansas Certification No. E-10135 (785)862-3500 fax(785)862-5132

Sample Collected By: T.G.

Lab Number: 1062574

Received In lab: 6/15/2006

Client: Larsen & Associates

Date Reported: 6/16/2006

913 Rhode Island

Project Name:

P.O. Box 1447

Project Number:

Lawrence, KS 66044

ATTN: Lisa Larsen

| Analysis | Method | Result | Detection Limit | Units | Date Analyzed | Analyst |
|--|--------------|--------------|-----------------|-----------|---------------|---------|
| 1062574-01 Sample ID: CN-CM-W-19917 | | | | | | |
| Sampled: 6/12/2006 | | | | | | |
| VOLATILE ORGANICS - METHOD | | | | | | |
| 2-Chloroethyl vinyl ether | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | 6/15/2006 | TPJ |
| Vinyl Chloride | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichlorofluoromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1-Dichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Dichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trans 1,2-Dichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1-Dichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,1-Trichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Tetrachloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Benzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichloropropane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Bromodichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trans 1,3-Dichloropropene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Toluene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Cis-1,3-Dichloropropene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,2-Trichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Tetrachloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Dibromochloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Chlorobenzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Ethylbenzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Bromoform | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,2,2-Tetrachloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,3/1,4-Xylene(m/p) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Xylene(o) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,3-Dichlorobenzene(m) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,4-Dichlorobenzene(p) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichlorobenzene(o) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |

M.D. Chemical and Testing, Inc.
P.O. Box 19321, Forbes Field, Bldg 281, Topeka, KS 66619
Kansas Certification No. E-10135 (785)862-3500 fax(785)862-5132

Sample Collected By: T.G.

Received In lab: 6/15/2006

Date Reported: 6/16/2006

Project Name:

Project Number:

Lab Number: 1062574

Client: Larsen & Associates

913 Rhode Island

P.O. Box 1447

Lawrence, KS 66044

ATTN: Lisa Larsen

| Analysis | Method | Result | Detection Limit | Units | Date Analyzed | Analyst |
|--|--------------|--------------|-----------------|-----------|---------------|---------|
| 1062574-02 Sample ID: MR-CM-W-16554 | | | | | | |
| Sampled: 6/12/2006 | | | | | | |
| VOLATILE ORGANICS - METHOD | | | | | | |
| 2-Chloroethyl vinyl ether | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | 6/15/2006 | TPJ |
| Vinyl Chloride | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichlorofluoromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1-Dichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Dichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trans 1,2-Dichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1-Dichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,1-Trichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Tetrachloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Benzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichloropropane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Bromodichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trans 1,3-Dichloropropene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Toluene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Cis-1,3-Dichloropropene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,2-Trichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Tetrachloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Dibromochloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Chlorobenzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Ethylbenzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Bromoform | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,2,2-Tetrachloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,3/1,4-Xylene(m/p) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Xylene(o) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,3-Dichlorobenzene(m) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,4-Dichlorobenzene(p) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichlorobenzene(o) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |

M.D. Chemical and Testing, Inc.
P.O. Box 19321, Forbes Field, Bldg 281, Topeka, KS 66619
Kansas Certification No. E-10135 (785)862-3500 fax(785)862-5132

Sample Collected By: T.G.

Received In lab: 6/15/2006

Date Reported: 6/16/2006

Project Name:

Project Number:

Lab Number: 1062574

Client: Larsen & Associates

913 Rhode Island

P.O. Box 1447

Lawrence, KS 66044

ATTN: Lisa Larsen

| Analysis | Method | Result | Detection Limit | Units | Date Analyzed | Analyst |
|--|--------------|--------------|-----------------|-----------|---------------|---------|
| 1062574-03 Sample ID: EV-CM-W-20122 | | | | | | |
| Sampled: 6/12/2006 | | | | | | |
| VOLATILE ORGANICS - METHOD | | | | | | |
| 2-Chloroethyl vinyl ether | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | 6/15/2006 | TPJ |
| Vinyl Chloride | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichlorofluoromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1-Dichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Dichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trans 1,2-Dichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1-Dichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,1-Trichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Tetrachloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Benzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichloropropane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Bromodichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trans 1,3-Dichloropropene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Toluene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Cis-1,3-Dichloropropene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,2-Trichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Tetrachloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Dibromochloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Chlorobenzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Ethylbenzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Bromoform | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,2,2-Tetrachloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,3/1,4-Xylene(m/p) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Xylene(o) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,3-Dichlorobenzene(m) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,4-Dichlorobenzene(p) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichlorobenzene(o) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |

M.D. Chemical and Testing, Inc.
P.O. Box 19321, Forbes Field, Bldg 281, Topeka, KS 66619
Kansas Certification No. E-10135 (785)862-3500 fax(785)862-5132

Sample Collected By: T.G.

Received In lab: 6/15/2006

Date Reported: 6/16/2006

Project Name:

Project Number:

Lab Number: 1062574

Client: Larsen & Associates

913 Rhode Island

P.O. Box 1447

Lawrence, KS 66044

ATTN: Lisa Larsen

| Analysis | Method | Result | Detection Limit | Units | Date Analyzed | Analyst |
|--|--------------|--------------|-----------------|-----------|---------------|---------|
| 1062574-04 Sample ID: NV-CM-2-20220 | | | | | | |
| Sampled: 6/12/2006 | | | | | | |
| VOLATILE ORGANICS - METHOD | | | | | | |
| 2-Chloroethyl vinyl ether | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | 6/15/2006 | TPJ |
| Vinyl Chloride | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichlorofluoromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1-Dichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Dichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trans 1,2-Dichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1-Dichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,1-Trichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Tetrachloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Benzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichloropropane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Bromodichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trans 1,3-Dichloropropene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Toluene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Cis-1,3-Dichloropropene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,2-Trichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Tetrachloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Dibromochloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Chlorobenzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Ethylbenzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Bromoform | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,2,2-Tetrachloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,3/1,4-Xylene(m/p) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Xylene(o) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,3-Dichlorobenzene(m) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,4-Dichlorobenzene(p) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichlorobenzene(o) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |

M.D. Chemical and Testing, Inc.

P.O. Box 19321, Forbes Field, Bldg 281, Topeka, KS 66619
Kansas Certification No. E-10135 (785)862-3500 fax(785)862-5132

Sample Collected By: T.G.**Received In lab:** 6/15/2006**Date Reported:** 6/16/2006**Project Name:****Project Number:****Lab Number:** 1062574**Client:** Larsen & Associates

913 Rhode Island

P.O. Box 1447

Lawrence, KS 66044

ATTN: Lisa Larsen

| Analysis | Method | Result | Detection Limit | Units | Date Analyzed | Analyst |
|---|--------------|--------------|-----------------|-----------|---------------|---------|
| 1062574-05 Sample ID: NV-QC-TB-61306 | | | | | | |
| Sampled: 6/12/2006 | | | | | | |
| VOLATILE ORGANICS - METHOD | | | | | | |
| 2-Chloroethyl vinyl ether | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | 6/15/2006 | TPJ |
| Vinyl Chloride | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichlorofluoromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1-Dichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Dichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trans 1,2-Dichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1-Dichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,1-Trichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Tetrachloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Benzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trichloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichloropropane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Bromodichloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Trans 1,3-Dichloropropene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Toluene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Cis-1,3-Dichloropropene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,2-Trichloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Tetrachloroethylene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Dibromochloromethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Chlorobenzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Ethylbenzene | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| Bromoform | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,1,2,2-Tetrachloroethane | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,3/1,4-Xylene(m/p) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Xylene(o) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,3-Dichlorobenzene(m) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,4-Dichlorobenzene(p) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |
| 1,2-Dichlorobenzene(o) | EPA 624/8260 | Not Detected | [0.5] | µg/L(ppb) | | |

M.D. Chemical and Testing, Inc.

*P.O. Box 19321, Forbes Field, Bldg 281, Topeka, KS 66619
Kansas Certification No. E-10135 (785)862-3500 fax(785)862-5132*

Sample Collected By: T.G.

Received In lab: 6/15/2006

Date Reported: 6/16/2006

Project Name:

Project Number:

Lab Number: 1062574


Client: Larsen & Associates

913 Rhode Island

P.O. Box 1447

Lawrence, KS 66044

ATTN: Lisa Larsen

| Analysis | Method | Result | Detection Limit | Units | Date Analyzed | Analyst |
|---|--------|--------|--------------------|-------|------------------|---------|
| <hr/> | | | | | | |
| 1062574-02: Three of the four vials were marked CN-CM-W-16554 | | | | | | |
| Approved By:  | | | | | Delbert Smith | |
| | | | | | 2006.06.16 | |
| | | | | | 11:46:09 -05'00' | |
| | | | | | Lab Manager | |

WATER VOLATILE SURROGATE RECOVERY

EPA Method 8260A

M.D. CHEMICAL & TESTING

SATURN 2000 w/ Tekmar 3000 PURGE & TRAP

RA-QC
Larsen
1062574

| EPA Sample No | S1 # | S2 # | S3 # | S4 # | S5 # | S6 # | S7 # | S8 # | S9 # | S10 # | S11 # | S12 # | S13 # | S14 # | S15 # | S16 # | S17 # | S18 # | S19 # | S20 # | TOTAL OUT |
|---------------|------|------|------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| 0615060XST | 103 | 102 | 101 | 104 | | | | | | | | | | | | | | | | | 0 |
| 061506BLK | 103 | 99 | 105 | 108 | | | | | | | | | | | | | | | | | 0 |
| 106256203 | 101 | 90 | 98 | 99 | | | | | | | | | | | | | | | | | 0 |
| 106256201 | 92 | 90 | 103 | 99 | | | | | | | | | | | | | | | | | 0 |
| 061506BLK2 | 102 | 104 | 104 | 127 * | | | | | | | | | | | | | | | | | 1 |
| 106256206 | 102 | 98 | 99 | 108 | | | | | | | | | | | | | | | | | 0 |
| 106256202 | 97 | 91 | 97 | 109 | | | | | | | | | | | | | | | | | 0 |
| 106256205 | 99 | 95 | 107 | 117 | | | | | | | | | | | | | | | | | 0 |
| 106256204 | 98 | 96 | 103 | 109 | | | | | | | | | | | | | | | | | 0 |
| 106256204D | 101 | 98 | 106 | 111 | | | | | | | | | | | | | | | | | 0 |
| 106256204S | 95 | 99 | 101 | 105 | | | | | | | | | | | | | | | | | 0 |
| 106256204S | 107 | 105 | 98 | 107 | | | | | | | | | | | | | | | | | 0 |
| 106255401 | 94 | 96 | 97 | 105 | | | | | | | | | | | | | | | | | 0 |
| 106255409 | 101 | 97 | 97 | 114 | | | | | | | | | | | | | | | | | 0 |
| 106255406 | 101 | 100 | 98 | 110 | | | | | | | | | | | | | | | | | 0 |
| 106255411 | 102 | 97 | 104 | 122 | | | | | | | | | | | | | | | | | 0 |
| 106255415 | 100 | 98 | 100 | 111 | | | | | | | | | | | | | | | | | 0 |
| 106255416 | 99 | 94 | 102 | 101 | | | | | | | | | | | | | | | | | 0 |
| 106255403 | 98 | 95 | 104 | 103 | | | | | | | | | | | | | | | | | 0 |
| 106255412 | 101 | 97 | 105 | 117 | | | | | | | | | | | | | | | | | 0 |
| 106255414 | 97 | 96 | 104 | 112 | | | | | | | | | | | | | | | | | 0 |

| EPA Sample No | S1 # | S2 # | S3 # | S4 # | S5 # | S6 # | S7 # | S8 # | S9 # | S10 # | S11 # | S12 # | S13 # | S14 # | S15 # | S16 # | S17 # | S18 # | S19 # | S20 # | TOTAL OUT |
|---------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| 106255417 | 100 | 93 | 103 | 121 | | | | | | | | | | | | | | | | | 0 |
| 106255404 | 99 | 93 | 100 | 113 | | | | | | | | | | | | | | | | | 0 |
| 106255410 | 100 | 96 | 100 | 109 | | | | | | | | | | | | | | | | | 0 |
| 106255413 | 102 | 95 | 99 | 118 | | | | | | | | | | | | | | | | | 0 |
| 106255405 | 97 | 93 | 98 | 121 | | | | | | | | | | | | | | | | | 0 |
| 106255407 | 101 | 99 | 98 | 108 | | | | | | | | | | | | | | | | | 0 |
| 106255408 | 106 | 100 | 102 | 109 | | | | | | | | | | | | | | | | | 0 |
| 106255402 | 104 | 97 | 106 | 114 | | | | | | | | | | | | | | | | | 0 |
| 106257201 | 100 | 95 | 106 | 117 | | | | | | | | | | | | | | | | | 0 |
| 106257206 | 101 | 98 | 100 | 121 | | | | | | | | | | | | | | | | | 0 |
| 106257214 | 98 | 93 | 100 | 115 | | | | | | | | | | | | | | | | | 0 |
| 106257401 | 98 | 97 | 104 | 123 | | | | | | | | | | | | | | | | | 0 |
| 106257402 | 100 | 99 | 102 | 117 | | | | | | | | | | | | | | | | | 0 |
| 106257403 | 101 | 99 | 101 | 111 | | | | | | | | | | | | | | | | | 0 |
| 106257404 | 103 | 102 | 99 | 106 | | | | | | | | | | | | | | | | | 0 |
| 106257405 | 99 | 94 | 97 | 112 | | | | | | | | | | | | | | | | | 0 |
| Replicates: | 37 | 37 | 37 | 37 | | | | | | | | | | | | | | | | | |
| Average: | 100 | 97 | 101 | 112 | | | | | | | | | | | | | | | | | |
| StdDev: | 3 | 3 | 3 | 7 | | | | | | | | | | | | | | | | | |

QC Limits
 (75 - 125)
 (75 - 125)
 (75 - 125)
 (75 - 125)

S1 = [SS1] Dibromofluoromethane
 S2 = [SS2] 1,2-Dichloroethane-d4
 S3 = [SS3] Toluene-d8
 S4 = [SS4] Bromofluorobenzene(BFB)
 # Column to be used to flag recovery values.

* Values outside of contract required QC Limits

D System Monitoring Compound diluted out

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Method 8260A

M.D.Chemical & Testing

Saturn 2000 w/Tekmar 3000 Purge & Trap

Matrix Spike - EPA Sample No 106256204

| COMPOUND | SPIKE ADDED | SAMPLE CONCENTRATION | MS CONCENTRATION | MS | QC |
|--------------------------------|----------------|-------------------------|---------------------|------------|---------------|
| | | | | % REC # | LIMITS REC |
| Methyl tert-Butyl Ether (MTBE) | 45.0 | 0.0 ppb | 35.9 | 80 | 70 - 130 |
| Benzene | 45.0 | 0.0 ppb | 40.6 | 90 | 70 - 130 |
| Toluene | 45.0 | 0.5 ppb | 41.7 | 92 | 70 - 130 |
| Ethylbenzene | 45.0 | 0.0 ppb | 39.6 | 88 | 70 - 130 |
| m/p-Xylene | 90.0 | 0.0 ppb | 82.3 | 91 | 70 - 130 |
| o-Xylene | 45.0 | 0.0 ppb | 47.4 | 105 | 70 - 130 |
| Naphthalene | 45.0 | 2.0 ppb | 54.1 | 116 | 70 - 130 |

| COMPOUND | SPIKE ADDED | MSD CONCENTRATION | MSD | | QC LIMITS | |
|--------------------------------|----------------|----------------------|------------|------------|-----------|----------|
| | | | % REC # | % RPD # | RPD | REC |
| Methyl tert-Butyl Ether (MTBE) | 45.0 | 49.0 | 109 | 31 * | 20 | 70 - 130 |
| Benzene | 45.0 | 53.7 | 119 | 28 * | 20 | 70 - 130 |
| Toluene | 45.0 | 49.2 | 108 | 17 | 20 | 70 - 130 |
| Ethylbenzene | 45.0 | 48.9 | 109 | 21 * | 20 | 70 - 130 |
| m/p-Xylene | 90.0 | 102.5 | 114 | 22 * | 20 | 70 - 130 |
| o-Xylene | 45.0 | 64.9 | 144 * | 31 * | 20 | 70 - 130 |
| Naphthalene | 45.0 | 74.2 | 160 * | 32 * | 20 | 70 - 130 |

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 6 out of 7 outside limits

Spike Recovery: 2 out of 14 outside limits

M.D. Chemical and Testing, Inc.

P.O. Box 19321, Forbes Field, Bldg 281, Topeka, KS 66619
Kansas Certification No. E-10135 (785)862-3500 fax(785)862-5132

Sample Collected By: Lisa Larsen

Lab Number: 1062502

Received In lab: 6/6/2006

Client: Larsen & Associates

Date Reported: 6/7/2006

913 Rhode Island

Project Name: Soil Cuttings-Centralia/Everest/Morrill Project


P.O. Box 1447

Project Number:

Lawrence, KS 66044

ATTN: Lisa Larsen

| Analysis | Method | Result | Detection Limit | Units | Date Analyzed | Analyst |
|----------------------|--------------------------|--------------|-----------------|------------|---------------|---------|
| <hr/> | | | | | | |
| 1062502-01 | Sample ID: Soil Cuttings | | | | | |
| Sampled: 6/4/2006 | | | | | | |
| Carbon Tetrachloride | SW 846-8260 | Not Detected | [0.05] | mg/kg(ppm) | 6/6/2006 | DS |
| Chloroform | SW 846-8260 | Not Detected | [0.05] | mg/kg(ppm) | 6/6/2006 | DS |


Delbert Smith
2006.06.07
10:22:29 -05'00'
Approved By: _____
Lab Manager

EPA Method 8260A

M.D. CHEMICAL & TESTING

SATURN 2000 w/ ARCHON (SOIL METHOD)

[illegible]

WATER VOLATILE SURROGATE RECOVERY

EPA Method 8260A

M.D. Chemical & Testing

Saturn 2000 Archon w/Tekmar 3000 Purge & Trap

| EPA Sample No | S1 # | S2 # | S3 # | S4 # | S5 # | S6 # | S7 # | S8 # | S9 # | S10 # | S11 # | S12 # | S13 # | S14 # | S15 # | S16 # | S17 # | S18 # | S19 # | S20 # | TOTAL OUT |
|---------------|------|------|------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| 060606BLK | 82 | 81 | 93 | 121 | | | | | | | | | | | | | | | | | 0 |
| 060606STD | 85 | 84 | 96 | 115 | | | | | | | | | | | | | | | | | 0 |
| 106248503 | 90 | 93 | 99 | 127 | | | | | | | | | | | | | | | | | 0 |
| 106248612 | 82 | 87 | 90 | 116 | | | | | | | | | | | | | | | | | 0 |
| 106248703 | 86 | 90 | 99 | 134 * | | | | | | | | | | | | | | | | | 1 |
| 106248501 | 84 | 88 | 92 | 119 | | | | | | | | | | | | | | | | | 0 |
| 106248502 | 83 | 82 | 89 | 115 | | | | | | | | | | | | | | | | | 0 |
| 106248601 | 86 | 87 | 91 | 121 | | | | | | | | | | | | | | | | | 0 |
| 106248602 | 84 | 82 | 93 | 120 | | | | | | | | | | | | | | | | | 0 |
| 106248603 | 90 | 89 | 92 | 116 | | | | | | | | | | | | | | | | | 0 |
| 106248604 | 83 | 84 | 90 | 118 | | | | | | | | | | | | | | | | | 0 |
| 106248701 | 85 | 84 | 96 | 122 | | | | | | | | | | | | | | | | | 0 |
| 106248702 | 92 | 91 | 99 | 127 | | | | | | | | | | | | | | | | | 0 |
| 106248702D | 87 | 88 | 90 | 125 | | | | | | | | | | | | | | | | | 0 |
| 106248702S | 81 | 65 * | 93 | 122 | | | | | | | | | | | | | | | | | 1 |
| 106248702S | 91 | 73 | 97 | 132 * | | | | | | | | | | | | | | | | | 1 |
| 106248605 | 91 | 89 | 95 | 127 | | | | | | | | | | | | | | | | | 0 |
| 106248606 | 84 | 84 | 89 | 124 | | | | | | | | | | | | | | | | | 0 |
| 106248608 | 80 | 75 | 93 | 119 | | | | | | | | | | | | | | | | | 0 |
| 106248610 | 87 | 67 * | 94 | 125 | | | | | | | | | | | | | | | | | 1 |
| 106248611 | 83 | 83 | 91 | 118 | | | | | | | | | | | | | | | | | 0 |

| EPA Sample No | S1 # | S2 # | S3 # | S4 # | S5 # | S6 # | S7 # | S8 # | S9 # | S10 # | S11 # | S12 # | S13 # | S14 # | S15 # | S16 # | S17 # | S18 # | S19 # | S20 # | TOTAL OUT |
|---------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| 106248607 | 81 | 57 * | 88 | 121 | | | | | | | | | | | | | | | | | 1 |
| 106248609 | 84 | 37 * | 91 | 123 | | | | | | | | | | | | | | | | | 1 |

Replicates: 23 23 23 23

Average: 85 80 93 122

StdDev: 3 13 3 5

| | QC Limits |
|------------------------------------|--------------|
| S1 = [SS1] Dibromofluoromethane | (70 - 130) |
| S2 = [SS2] 1,2-Dichloroethane-d4 | (70 - 130) |
| S3 = [SS3] Toluene-d8 | (70 - 130) |
| S4 = [SS4] Bromofluorobenzene(BFB) | (70 - 130) |

Column to be used to flag recovery values.

* Values outside of contract required QC Limits

D System Monitoring Compound diluted out

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

EPA Method 8260A

M.D. Chemical & Testing

Saturn 2000 Archon w/Tekmar 3000 Purge & Trap

Matrix Spike - EPA Sample No 106248702

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC # | QC LIMITS REC |
|--------------------------------|--------------------------|-----------------------------------|-------------------------------|------------------|---------------------|
| Methyl tert-Butyl Ether (MTBE) | 45.0 | 0.0 | 44.1 | 98 | 70 - 130 |
| Benzene | 45.0 | 0.0 | 46.0 | 102 | 70 - 130 |
| Toluene | 45.0 | 0.0 | 43.5 | 97 | 70 - 130 |
| Ethylbenzene | 45.0 | 0.0 | 41.6 | 92 | 70 - 130 |
| m/p-Xylene | 90.0 | 0.0 | 87.4 | 97 | 70 - 130 |
| o-Xylene | 45.0 | 0.0 | 56.7 | 126 | 70 - 130 |
| Naphthalene | 45.0 | 0.0 | 34.0 | 76 | 70 - 130 |

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC # | % RPD # | QC LIMITS RPD REC |
|--------------------------------|--------------------------|--------------------------------|-------------------|------------|----------------------|
| Methyl tert-Butyl Ether (MTBE) | 45.0 | 46.3 | 103 | 5 | 20 70 - 130 |
| Benzene | 45.0 | 48.3 | 107 | 5 | 20 70 - 130 |
| Toluene | 45.0 | 45.0 | 100 | 3 | 20 70 - 130 |
| Ethylbenzene | 45.0 | 43.4 | 96 | 4 | 20 70 - 130 |
| m/p-Xylene | 90.0 | 92.6 | 103 | 6 | 20 70 - 130 |
| o-Xylene | 45.0 | 60.4 | 134 * | 6 | 20 70 - 130 |
| Naphthalene | 45.0 | 40.1 | 89 | 16 | 20 70 - 130 |

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 7 outside limits

Spike Recovery: 1 out of 14 outside limits



WASTE MANAGEMENT

Midwest Industrial Sales Office
7780 E. 96th Ave.
Henderson, CO 80640
(303) 336-3900
(303) 280-9848 Fax

June 13, 2006

Lisa Larsen
Larsen & Associates Inc.
P.O. Box 1447
Lawrence, KS 66044
FAX #: 785-865-4282
RE: WM/KDHE Profile Number: 06-0581
Generator: USDA, Potentially cont. soils
Expiration Date: 12/08/2006

Dear Ms. Larsen:

This letter shall serve as written confirmation that Rolling Meadows has all necessary permits and licenses to accept the waste materials described on the above referenced profile. Limitations on acceptance if any are noted at the base of this letter.

Please be sure to enter your profile number on the Non-Hazardous Waste Manifest. If you would like assistance in completing the Manifest, or need additional manifests please contact Debbie Neff at (785) 246-0305. **All loads received at the landfill require a 24-hour notice. Please contact the landfill at (785) 246-0305 for scheduling.**

Thank you for allowing Waste Management to assist you with your waste disposal needs.
Sincerely,

A handwritten signature in cursive script, appearing to read 'Lisa Adam'.

Lisa Adam
Waste Management Industrial Sales
Kansas M/A

If not otherwise specified herein, no special conditions exist:

- ✓ No free liquids allowed.
- ✓ Subject to inspection by WMI.
- ✓ Manifest each load.
- ✓ Drums must be labeled non-hazardous.



INDUSTRIAL WASTE & DISPOSAL SERVICES AGREEMENT

Exhibit A

| | |
|--------------|---------|
| WM Profile # | 06-0581 |
|--------------|---------|

| | |
|---------------|--|
| CWM Profile # | |
|---------------|--|

| CUSTOMER BILLING ADDRESS |
|-------------------------------|
| Larsen & Associates Inc. |
| P.O. Box 1447 |
| Lawrence, KS |
| Contact Phone: (785) 841-8707 |

| CUSTOMER CONTRACTING ADDRESS (If different from Billing Address) |
|---|
| |
| |
| |
| |

| CUSTOMER SERVICE LOCATION (If different from Billing Address) |
|--|
| USDA |
| |
| Everest, KS |
| Contact Phone: (785) 841-8707 |

| | | | | | |
|----------------------------|--------------|-------------|-----------|-------------------|--|
| WM Customer Service Phone: | 720-977-2114 | WM Contact: | Lisa Adam | WM Contact Phone: | |
|----------------------------|--------------|-------------|-----------|-------------------|--|

Service Information

| | | | | |
|-----------------------------|--|--|---|-------|
| Generator: | USDA | | | |
| Ground Transporter: | N/A | | | |
| PO#, SO#, Job #: | N/A | | | |
| Waste Description: | Potentially cont. soils | | | |
| Disposal Cost: | \$75.00/dr | | | |
| Profile Fee: | \$100.00 | | | |
| Additional Cost: (describe) | Fuel Surcharge & Environmental Fee | | | |
| Additional Cost: (describe) | Trans option 1 - 20yd roll off \$525 delivery, \$525/trip, \$7.00/day after 7 th day, \$75.00/liner | | | |
| Taxes: | \$2.50/Ton State & Local Taxes | | | |
| Transportation Fee: | Trans option 2 - Transporter load \$1500.00/trip or Trans option 3 - Customer load \$1000.00 | | | |
| Containers provided by WM: | Quantity: | Size: | Quantity: | Size: |
| | Quantity: | Size: | Quantity: | Size: |
| | Quantity: | Size: | Quantity: | Size: |
| Pick-up Frequency: | N/A | | | |
| Contract Expiration Date: | 12/08/2006 | | | |
| Additional Information: | NON-HAZARDOUS MANIFEST MUST ACCOMPANY EACH LOAD. | | | |
| Salesperson Code: | State 2 digit code: | Waste CAT: <input type="checkbox"/> BA <input type="checkbox"/> EV | Waste Type: <input type="checkbox"/> MD <input type="checkbox"/> SP <input type="checkbox"/> ID <input type="checkbox"/> HZ | |

THE WORK CONTEMPLATED BY THIS EXHIBIT A IS TO BE DONE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE INDUSTRIAL SERVICES AGREEMENT OR OTHER CONTRACTUAL AGREEMENT BETWEEN THE PARTIES DATED:

6/13/2006

COMPANY

By: _____
 Name: Bill Lay
 Title: Industrial Account Manager

6/13/2006

Date

CUSTOMER

By: _____
 Name: Lisa Larsen
 Title: _____
 Date: _____



Environmental Science Division

Argonne National Laboratory

9700 South Cass Avenue, Bldg. 203

Argonne, IL 60439-4843

www.anl.gov



UChicago ►
Argonne_{LLC}

A U.S. Department of Energy laboratory
managed by The University of Chicago